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AN APPEAL

TO THE

Agriculturists of the Middle Atlantic States.

The undersigned were appointed a committee by the *Maryland State Agricultural Society*, at its late anniversary meeting, to address those of their fellow-citizens connected with agriculture in the States of Pennsylvania, New Jersey, Delaware, Maryland, Virginia, and North Carolina, on the importance of becoming members of this society, and holding great annual agricultural exhibitions in the city of Baltimore, at which this large central district shall be represented.

In the early history of the country this agricultural section of the Union was regarded as unsurpassed; being considered the most favored in soil and climate, bordered and intersected by fine navigable waters, producing rich staples, and generally conveniently situated to the markets. A series of years of general prosperity followed, rendering independent if not enriching its rural population, and of which the whole country felt the benefit.

But a system of the most exhausting husbandry was generally pursued; crop succeeded crop in rapid succession, drawing from the earth its last treasure, until no more drafts could be fully honored; the result of all which was, to leave the tillers of much of this soil with but limited, instead of ample means, to reduce some to poverty, and force others to seek new homes among the fresh unfurrowed lands of the West. By a slow and gradual introduction of a somewhat improved husbandry, a favorable reaction commenced in some of these States years back, that partially stayed the tide of emigration from them, which threatened to impair both their physical and political power and importance. The evil, though to some extent counteracted, has not, in regard to all these States, been yet removed, since their already too sparsely settled population is still decimated at intervals of a few years, occasioning a loss to the State second only to that of the territory that is thus deserted and abandoned.

The remedy for all this, a means to retain those who would leave us, and render more prosperous and happy those who would remain, satisfied that no change can be for the better, is for the united landed interest of these middle Atlantic States to arouse themselves, and fully arouse the public mind, to the importance of improving our husbandry to the greatest possible extent of our ability and means to do so; invoking in its aid all the recent lights which art, skill, and science have demonstrated to be favorable to its accomplishment.

If we take only this political economic view of the subject, looking to self-preservation, and to sustaining ourselves in a powerful competition where new rivals are constantly entering the field, such is the conclusion at which we must arrive. But our pride, and patriotism, and interest, is roused to enter with spirit and energy upon this new era: an era that commenced in England but some forty years back, and which is as distinct from the rude systems that preceded it as the dark ages were from the advanced civilization that followed them. We should enter upon it with a determination to excel, and not to be satisfied with mediocrity, or even a respectable relative position, but determined to place these States where they early stood, at the very head of the agriculture of the Union. Nor is there any thing extravagant in such a proposition; there are agencies and resources at our command that can be relied on to bring about such a result. Our position is the most central in reference to the markets; these the agriculturist cannot create, but having them to his hand, he may create, by the aid of labor, skill, and science, the means of supplying them to an almost unlimited extent.

Among the means of which we should at once promptly avail ourselves is the establishment of agricultural societies, and particularly one great central society.

A striking feature of all civilized society is its concentration of numbers, and from associated mind, labor, and skill, excited by a spirit of emulation, the result of competition and direct comparison, early ensuring a degree of excellence and perfection that the solitary denizen might plod on in search of and find a single life too short to attain. The effect of this focal action, not only in producing results, but also especially in exhibiting these results to the world, that they may be seen and copied, is being more and more appreciated; and hence the sphere of these exhibitions of the arts of life has gone on widening and extending, until we hear now

of a call for "the World's Industrial Exhibition."

England, so provident and wise, and her landed interest always so fostered and cherished, early established her *Royal Agricultural Society*, with its six thousand members, at an annual subscription of a guinea each; while each of her counties, and often subdivisions of counties, have also their societies and annual exhibitions.

The great Agricultural Society of the State of New York, aided by legislative appropriations, has not only advanced her own agriculture, given it notoriety and fame, but this society has become in some sort national in the sphere of its operations, since portions of New England, as well as some of the Northwestern States, annually participate in its exhibitions, and the wholesome influence of all is diffused through a still more extended district of country.

The Maryland State Agricultural Society was established about two years since, and has held two most interesting and successful exhibitions at the city of Baltimore. The fact that its exhibitions, from the very central position of this metropolis, were found to attract a respectable number of those zealously engaged in agriculture in several of the neighboring States, a number of whom promptly connected themselves with the society; the importance and necessity to all these Middle Atlantic States of agricultural associations; and the conceded advantage, at the same time, of one great *central society*, resembling in its character and position, and rivalling, if possible, in its numbers and influence for good the Agricultural Society of the State of New York, induced the Maryland Society to raise a committee, representing the States proposed to be embraced, that an appeal might be made to our farmers, planters, and graziers, in behalf of such a general organization. In the event of a favorable response to this appeal, the name of the society, in the discretion of its members, may be changed so as to describe its more general character.

The city of Baltimore is as convenient of access to portions of the citizens of all these States as their own State capitals. The public thoroughfares will transport stock free of charge, and the members of the society at one-half the usual rate; such, at least, has been their liberal practice heretofore; so that the distance in any case opposes but slight obstacles to this great annual assemblage of those connected with the landed interest.

Such a society would represent a much greater variety of tillage and productions than any one State society, since the general husbandry from Pennsylvania to North Carolina would be included, embracing specimens and varieties of seed, of grain, of grass, and plants; the whole department of horticulture and floriculture, and including the extensive grazing districts, commencing in Pennsylvania, with the different varieties of grasses and the products of the dairy; all these gathered contributions from this extended and populous district of country would be centred at one point for the examination and inspection of all. A spirit of generous emulation would bring forth the fine stock of every description. New Jersey would challenge Virginia with her fine blooded horses; Pennsylvania would meet Maryland with her improved herds of cattle; and the breeds of fine sheep of every variety from Pennsylvania, Delaware and Virginia would contend for excellence. All this would necessarily, and as a matter of course, result in improving our husbandry, and improving our stock. The importance of using the best varieties of *seeds*, both of grain and grass, is second to no other, since this simple matter may often decide whether the husbandman is able to harvest a full crop or but half a one—cut an abundant crop of grass, or none at all. And what a benefaction would that institution or association confer, whose operations should result in materially improving the stock of a great rural district, which, in all agricultural communities, constitutes so large an item of the wealth of the State?

Another decided advantage of one great central exhibition is, that, from its importance and the numbers it would be sure to assemble it would attract and bring to *one point* all the best and latest improved agricultural implements and machinery for the examination of the improving agriculturist. In a country like ours, where the expense of labor is now almost our only obstacle to great improvement and immensely increased production, the importance of labor saving machinery can hardly be over-estimated. The fanning mill, the horse-rake, the reaping and threshing machine, all introduced within the last forty years, save annually an amount of labor sufficient to clear up and settle a State.

Several of these were invented and constructed years before they were generally known to the public. Hussey's reaper, for instance, which was first patented some sixteen years back, has only within the last five or six years got to be generally known and used; yet, to the very district of country proposed to be embraced in this society, this single machine would have saved thousands and hundreds of thousands of dollars had it gone into use immediately after it was invented; and had a large central agricultural society existed, there is little doubt but it would, as through the reports of committees and an opportunity of personal inspection its value would have become known. It is not only what is seen at these great fairs, but what is heard, that profits—what is learned from reports of committees, essays, and also from *discussions*, which should always form a part of the exercises to be continued throughout the exhibition. It has been said:

> "The patriarch pupil may be learning,
> Still, dying, leave his lesson half learned."

And how true is this of agriculture, where the great book of nature, in its mystery and its truth, has to be forever studied; and science, art, and contemporary means examined and exhausted in expounding it? Can any intelligent agriculturist doubt for a moment that, as a mere matter of interest, a matter of dollars and cents, he would not be vastly the gainer by an association with such a society? As a matter of pleasure and personal gratification, he must also seek a connexion, unless indeed he would prefer to make his life a solitude and his avocations a monotony in which one day would describe the cycle.

The agricultural interest of the country requires a concentrated and well-directed public opinion. In the absence of any organization to create and give expression and direction to such opinion, literally *nothing* has been done by the Government for agriculture. It is at the end of sixty years without a department or bureau, or hardly records of any kind existing among its archives at Washington—if we except a few huddled away in one corner of the Patent office—to show that such an interest as agriculture has existence among us. Yet agriculture is the basis and support of all other interests, and surplus products spreads the sail of commerce,

starts the shuttle of the manufacturer; it feeds all, clothes all; "like the heart, it gives vitality, life, and motion to the whole body politic; and, let its mighty pulsations once be stopped or impeded, and a general prostration follows."

It is time the agricultural community appreciated more fully their numerical strength and their moral power.

In no country is the landed interest or the independence and position of the freeholder so little valued and appreciated as in our own. Placed on his own independent domain, away from the influence of those luxuries that enervate the body and those associations that may corrupt the mind, with no bargaining, chaffering occupations to whet the zeal for avarice and dry up the sources of a generous hospitality; the firm friend of the State that he supports by unequal taxes levied upon his lands; always conservative, loving liberty, and fostering and sustaining those institutions of education and religion upon which it most safely reposes, still, although associated with a majority as strong as five to one, if he does not himself actually defer to this majority in all things, he is more often looked upon as occupying a position neither enviable for its station nor desirable for any emoluments it confers. For all this, it is true, he has generally most himself to blame. The honors of the Senate, or the bar, the respectability of professional and political life, or the wealth created by trade, are objects often proclaimed as those most to be coveted. Yet how uncertain are these in the pursuit, and often how unsatisfactory in the enjoyment?

The difficulty heretofore has been to render agriculture attractive to the young and ardent aspirer after *distinction* in some form; and hence the misapplication, and almost total waste of talent and energy to the country, as exhibited in our over-crowded professions, the thronged arena of political life, and the brokers' boards and stock jobbing associations of our large commercial cities.

But through these societies, and the eclat and distinction they will contribute to give to agriculture, with the aid of a literature by which this profession as well as others may now be studied—the *esprit de corps* which is likely to bind the freeholders to the soil in closer ties—our young men of talents and education are likely many of them to be attracted to the pursuit of agriculture, and to prefer its more sure rewards, its calm philosophy, its tranquil enjoyments, that "peace within and harmony all around," to any uncertain honors the professions can offer, or to any mere sordid pursuit of common.

But, like the Grecian father, who annually took his sons to witness the olympic games to inspire them with emulation, or school them for the contest, they should never fail to be in attendance at these anniversary shows in honor and promotion of agriculture. As a school, then, for his sons, the American planter and farmer should encourage these associations, always attending them himself as an active participating party, and not as an idle spectator.

Our great WASHINGTON gloried in the name of an agriculturist; he realized and fully appreciated the dignity of the calling, nor was his great mind above giving attention to all its details. The world has generally known him but as a hero and statesman, but we, his grateful countrymen, should also cherish his memory as the ardent friend and great patron of agriculture. Amidst the councils of cabinets, and from the head of armies, he actually found time (such was his love of agriculture) to direct in a general way, through a correspondence with his overseer, the tillage of his fields at Mount Vernon, and also to conduct an able correspondence with Sir John Sinclair on agricultural subjects, the fruits of which his countrymen are now enjoying.

On the very subject of these agricultural associations and institutions, Washington thus forcibly expressed himself in his last message to Congress: "This species of establishment contributes doubly to the increase of improvement, by stimulating to enterprise and experiment, and by drawing to a common centre the results every where of individual skill and observation, and spreading them thence over the whole nation. Experience accordingly has shown that they are very cheap instruments of immense national benefit."

Can the rural population of these old Atlantic States, with so many thronging memories connected with the past, better testify their gratitude to the Father of his Country, or better serve that beloved country itself, than by emulating the zeal of this great and good man in the cause of agriculture? Washington would have been one of the first in time of peace to join an Agricultural Society, as he was in war to join the standard of his country. One of his humblest virtues we might at least seek to imitate.

But not only interest and patriotism, and the love of our calling should induce us to come forward and join and support this association, but rest and recreation invite to one gladsome day of jubilee. The planter and farmer are not without their cares, toils, and anxiety. Now the seasons are unpropitious; now the insect attacks his crops; but skill, energy, and perseverance may do much even here, and these are exerted to the last degree. Again, the harvest has to be safely secured, the earnings of the year depending upon it, making the season one of watchfulness and toil.

> "'Tis now he bears the burden most
> Till sweat is on the brow."

It is hard indeed if he may not rest a few days from his labor, and strange if he should grudge himself a few dollars though hardly earned, to be expended in rational and social intercourse and enjoyment with those of his brethren engaged in a common calling, and with a view at the same time to a great ulterior good. A parsimony that would grudge a small annual contribution towards the support of an Agricultural Society, would justly cast a reflection on our public spirit, and bring a scandal on such an illiberal use or withholding of our means. Even the humble mechanic, the day laborer, in his connexion with a Mechanics' Institute, or an Odd Fellow's Lodge, is subjected to twice the tax of the landed proprietor in his connexion with an Agricultural Society; so that, on the ground of expense, he cannot fairly excuse himself for foregoing the advantages he would receive, and the good he would confer.

Whatever is done should be done *promptly and at once*. Let all who are friendly to the objects in view at once lend their co-operation; in other words, forward their names and address to *Samuel Sands, Esq., Secretary, Baltimore*, with a request to be enrolled as members, and also *volunteer to procure lists of signatures from among their friends*. At the next Autumn exhibition they will pay to the Treasurer the small sum of three dollars each, and enjoy the full privileges of membership. Editors

of papers who publish this Appeal, and forward a copy of their paper to Mr. Sands, will be enrolled as free members for one year. Again we say to our brother agriculturists, *Go to work*—interest yourselves in this *important matter*, and endeavor to swell the numbers of this Society that they may equal those of any other now existing, and fairly represent this large minority of "the old thirteen." Early action is necessary in reference to the formation of committees and other important arrangements.

CHAUNCEY P. HOLCOMB, of Delaware,
A. BOWIE DAVIS, of Maryland,
BERNARD PEYTON, of Virginia,
FREDERICK WATTS, of Pennsylvania,
AARON ROBERTSON, of New Jersey,
J. H. BRADLEY, of District of Columbia.

WORK FOR THE MONTH.

MARCH.

This is a month when every farmer and planter, who desires to prosper through his labors, must not only toil, but toil with intelligent and well directed energies. His arrangements, which we trust were judiciously conceived and planned, must be carried out with unceasing care and diligence. No effort must be left unessayed to accumulate, husband, and apply manures. Every thing on a farm capable, by decomposition, of becoming the food of plants, must be collected and so treated as that its virtues will not become deteriorated before it be covered by the plough.

By this time, as indicated above, every one should have matured his plans of operations for the year, the which, if it does not exceed the capacity of the force of the farm to carry into effect fully and well, should be carried out to the letter; but if, on a review of the one and the other, any should find that his outlines are too expansive, it is better to contract them to the proper limits, so as to meet the physical abilities of his means and force, as no one can advantageously pursue any business unless it is within his power to do it well. To merely scratch over many acres, with a complement of hands which may only be sufficient for half the number, is to work so obviously against one's interest, that it is only surprising that the thing should ever be attempted. In the culture of corn, for instance, unless the land be really fertile—very fertile—no one should ever undertake to cultivate more land than he can liberally manure, as it is a well established fact, that one acre thus treated, if well cultivated, can be made to produce more bushels of corn than quadruple the number of acres when grown in poor ground, unassisted by manure.

With these preliminary remarks, we shall direct your attention to certain matters that should be attended to

ON THE FARM.

Sowing Clover Seed.—Those who did not sow clover seed on their wheat fields last month, should do so this, seizing the first opportunity when there is no danger of poaching the ground. We would advise, also, that, after sowing the seed, they pass the roller over the field; indeed, were it a field of ours, we should harrow in the clover seed lightly, and then roll. We advise every one who may have a wheat field unseeded, not to fail to sow clover seed thereon, as, without clover, it is impossible to carry on a progressive state of improvement; whereas, with clover and lime, or marl, any soil, susceptible of growing clover, may be brought up to the most desirable state of fertility; and we are free to affirm, as a general rule, that liming without clover or grasses, confers, comparatively speaking, but temporary benefit, as lime must have the materials to work up into manure; and these can alone be secured to the soil by a liberal cultivation of clover and the grasses, as there are but few, if any, farms which supply a sufficient quantity of vegetable and animal manures, through the ordinary processes of accumulation, to counteract the exhaustion of the soil, consequent upon the annual removal of crops therefrom. A beast of burthen, if well fed and cared for, can, with ease, daily perform his usual round of labor: but stint him in his food, and neglect his comforts, and his capacity for toil decreases in the same ratio he may have been neglected. So is it with the land: unless you feed it, it will, after a series of years, become deprived of its elements of reproduction, and cease to reward the toils of the husbandman.

Oats.—This grain should be seeded as soon after the frost is out of the ground as possible. The ground should be well and deeply ploughed, and thoroughly pulverized by harrowing lengthwise and crosswise. Whether the seed be ploughed or harrowed in, the ground should be rolled, in order to compress the earth around the seed, and thereby promote an early and vigorous germination. The early sown oats always make the most grain. It is a safe practice to sow with oats a mixture of salt, ashes and plaster; 2 bushels of each of the two first and 1 of the latter are enough for an acre, provided the land be in good heart; but as a poor soil, unaided, never yet produced a large crop of oats, we doubt the policy of seeding oats on such land without previously manuring it. Either of the following substances will manure an acre: two hundred pounds of guano, 8 bushels of bone dust, five loads of manure, or 10 loads of marsh mud, and 10 bushels of lime, and ensure a good crop of oats, and possibly allow of sowing clover with the oats—a thing which, when the constitution of the soil will admit of it, should always be done, if for no other object than that of shading the earth after the oats are out, and having a vegetable body to plough in, to increase the fertility of the soil for the production of the succeeding crop. Indeed, we believe that it would be a wise and economical policy to sow clover seed with all small grain, where the soil has sufficient heart to grow it.

Advantages of Subsoil Ploughing.—We find the following, upon this subject, already prepared to our hands, by our esteemed friend, Dr. *Holmes*, of the *Maine Farmer*, and commend it to our readers with the more pleasure as it has his endorsement:

"Our object is to present our readers with all the light we can collect from the various publications that come to hand, respecting this process. It is a new subject to the farmers of Maine; and as it is attended with considerable expense, we would be cautious in urging it upon our friends, without good evidence of its utility. In the last number of the Working Farmer, we find some statements in regard to sub-soiling, from which we extract the following. James Carnahan, President of Princeton College, states the results of an "unintentional" experiment he made in 1848, in sub-soiling.

I wished, says he, to sub-soil a lot in soil with a hard pan, and as I had only one team, I hired another to turn over the sod preceding the sub-soil

plow. He came and worked one day, but did not return the next. As the time for planting was approaching, I directed my farmer to go on and plow in the common way as deep as he could. He did so. The following day, the other ploughman returned, worked a day (sub-soiling) and then was absent.

The result was, the lot was plowed alternately with the common plow and the sub-soil. The whole lot manured and worked in the same way, except the sub-soiling of some parts and some not. The month of August was dry; the corn in the sub-soiled suffered very little; that on the part not sub-soiled suffered very much.

When the corn was gathered, we could distinguish the very row where the sub-soiling was commenced and ended—*the ears were more numerous and of a larger size.*

I did not measure the corn nor the ground, but the difference was so obvious to the sight, that no one could doubt the superiority of the corn on the ground sub-soiled.

This year the whole of my corn ground was sub-soiled, and the yield was very satisfactory. The month of July was dry and hot, and the leaves of my corn did not shrivel, while those in the adjacent fields rolled up.

The next instance of improvement by subsoiling is one also connected with draining. Perhaps some of our readers may recollect that we gave in the Farmer an instance of improvement of a field by draining, made by Mr. Goodwin, of Rome in this State. Mr. Goodwin estimated the profit to him as equal to 25 per cent. on the cost.

The present instance we also find in the Working Farmer, communicated by Mr. B. Webb, of Wilmington, in Delaware.

According to his statement, he drained, last spring, about four acres of hard clay bottom. He then well manured it, and sub-soiled a part of it, and planted it to corn.

An acre that was drained, surface plowed and sub-soiled, produced 86½ bushels of ears of sound corn. An acre that was drained, but worked in the usual way, produced 80 bushels. An acre adjoining the drained part, of about the same quality of land, but not so flat, and of course better calculated to raise a crop, produced, with the same manure and tillage, 41½ bushels.

The drains were made 33 feet apart, as he intended to double their numbers. It now appears that when the draining is finished, it will cost $30 per acre.

Mr. Webb further states that his land was considered by one of his neighbors as a cold, dishy kind of land, so flat that the water would not run off; and even if it would, the soil was so poor that nothing could grow upon it, but swamp grass—when this neighbor saw the hands employed in the work of draining, &c., he inquired whether the owner thought the produce would ever pay the expenses.

The outlay was commenced in April, and in December Mr. Webb says the capital is all returned with 7 per cent. interest, and the land highly improved.

These facts are important and encouraging, and worthy the candid consideration of the farmers throughout the Union. It is the business of the farmer to prepare the soil so as to make the best possible situation for the roots of plants to spread abroad and suck up the substances essential to their growth. Deep and thorough pulverizing is of the utmost importance, especially in the culture of corn, whose roots spread both wide and deep. If the sub-soil plow will effect this, and the results be as much greater for its use as above stated, every farmer should use it. Give it a try next spring."

Draining. — If you have marshes that afford nothing, in the shape of vegetation, but coarse wild grasses, drain them, if their grades admit of that operation. By so doing, you will be able to convert them into fertile arable lands, capable of yielding better crops than any other part of your farm: but, independent of this great good, you will cut off the sources of marsh miasma, and thereby get rid of the cause of autumnal fevers, render your place healthy, and consequently increase its value in the market, should you feel disposed to sell it. All such marsh lands, when drained and rendered dry, should be limed with 100 bushels of lime per acre, or have double that quantity of marl applied to them, for the three-fold purpose of neutralizing the acids in the soil, of converting the vegetable matter into the food of plants, and for the promotion of health.

Permanent Pastures.—We have often advised the formation of permanent pastures, and will here suggest a very easy method by which those who have worn-out old fields may convert any portion of them they may please into these desirable appendages to a farm. If there be no fence around any such old field that may be destined for a permanent pasture, put up one; then put on each acre of it 8 or 10 bushels of bone dust; break it up thoroughly; harrow it well; sow on each acre 10 lbs. of *clover seed*, ½ a bushel of red top, 1 bushel of *orchard grass* seed, 5 lbs. of sweet scented vernal grass seed, and ½ bushel of Kentucky blue grass seed; then sow a bushel of plaster to the acre, and roll, or first harrow in lightly, and then roll; keep the stock off the first season, and spread 50 bushels of lime, or 100 bushels of marl, thereon, per acre, the succeeding fall or winter, and a permanent pasture will have been formed. This will relieve you from the disagreeable alternative of forcing your cattle to the necessity of subsisting in the woods, or on the roads, and relieve you also of the pain of being frequently brought into collision with your neighbors, on account of the depredations of your stock. Your good example will make those neighbors emulate it, so that, in a few years, you will have just cause to be proud of your provident care, in marshalling them the way they should have gone years before; besides which, your cattle and other stock will be kept in better plight, and, as a consequence, yield you more profit.

Early Turnips.—So soon as the frost is entirely out of the ground, and it will allow of being put in first rate order, you may sow a patch of early turnips, for the use of your family, for market, or to be fed out to your cattle other than milch cows. The sooner they are sowed after the period we have named, the better, as they should have an opportunity to mature before hot weather comes on. The best manure for them would be a compost formed of decomposed manure 5 parts, ashes 1 part, lime 1 part, and bone earth 1 part; but if it should not be convenient to command all these substances, a compost formed of 6 parts rotted manure, 1 part marsh mud, and 1 part lime or ashes, will answer. If no lime or ashes be at hand, the manure alone will answer; but whatever may be used as manure, a full dose must be given, as turnips, like most other rapid growers, require to be well and fully

fed. One-half of the manure should be ploughed in to the depth of the furrow; the other half harrowed in, so as to be immediately available to the plants on their first coming up, to push them forward into the rough leaf beyond the harming of the fly. When the plants first come up, they should be well dusted with lime or ashes, or a mixture of plaster and salt. This operation may be very advantageously repeated at the first working. To ensure a fine growth of turnips, lime and ashes form essentials in the manure to be applied to them, especially the latter.

400 lbs. of guano, to be ploughed in, will grow an acre of turnips well and luxuriantly; but the turnips would be the better of having 5 or 10 bushels of ashes sown broadcast over them when they first come up.

Early Potatoes.—As early potatoes pay best, you should get in an acre or two. For the method of culture, see an aticle in another column, upon the subject.

Root Culture.—A few acres of land planted in roots, as sugar beets, mangel wurtzel, carrots, parsnips and ruta bagas, would enable a farmer to carry his milch cows and sheep through the winter well, at but little cost of outlay, and with equal profit and satisfaction. We mention the subject thus early, and in advance of the time of sowing, in order that our agricultural readers may have time to prepare the necessary manure, and make such other arrangements as may be requisite to make an experiment in root culture. We do so because we feel well assured, if they once test the thing fairly, they will be so well satisfied with its results, as to become converts to the root culture as a branch of their farming system ever afterwards, as we are certain it will increase the products of their dairy, improve the quality of both milk and butter, while it will enhance the quantity, and give increased value to the fleeces of their sheep; but then there is another consideration which should, and as we hope will, operate powerfully in every philanthropic heart: it will increase the comforts of the stock, and enable the owner to carry them through the winter in better health and condition. This consideration alone, independent of pecuniary benefit, should, and doubtless will, have an important influence upon the minds of those who regard themselves as stewards of all and every thing on and about their homesteads.

Artichokes.—If every farmer, who may raise his 30 or 40 hogs a year, would set apart a lot, two acres in extent, to the growth of artichokes, he might calculate that that lot would afford that number of hogs ample food from about the 1st of October until he should pen them to fatten in November. The artichoke requires about the same soil, manure and culture as corn, and will yield to the acre from 5 to 600 bushels of tubers. If the stalks are cut in the beginning of October, and dried, they make excellent fodder for cattle. All the farmer will have to do, after drying, removing and stacking the fodder, will be to turn his hogs into his artichoke lot, provide them with charcoal, ashes and rotten wood, occasionally, and they will do all the digging themselves, but still leaving enough to set the lot again for many successive years, provided the farmer, on withdrawing his hogs, shall take the precaution to harrow the ground, and thus return to the soil the manure made while the hogs may have been engaged in feeding thereon. It is not saying too much to state that hogs will increase in weight at least a pound and a half a day, be fat when penned, and then only require *corn* for the purpose of hardening their flesh, thereby economising the use of that grain. In April and May will be the time to plant; in the meantime, prepare your manure, and procure seed—15 bushels to the acre.

Repairing Fences.—Every fence on the farm must be thoroughly examined—and this can alone be done by the master himself—in order that the necessary posts and rails may be hauled into place, ready for use when needed. Do not delay this from day to day, as you may rest assured that there is no labor on your farm more conducive to your interest than this.

Fence Sides.—If these are lined by bushes, have them cut down, so that the passer-by may not draw conclusions unfavorable to your reputation. But there are other considerations that should move you to action: the *shade* of bushes cause the materials of your fence to rot, while, to a certain extent, it operates to stunt the growth of that part of your crop within its range.

Implements and Tools.—Overhaul all your implements and tools, and have all that may need it repaired. Do not postpone this duty until you may want to use any of them; if you do, the smith or the wright may not be at leisure to repair them when you send them, and thus may you be kept several days idle, for the want of them. Attention—timely attention—to these matters is ever promotive of a farmer's interest; and hence he should always make it a point to be particular in the discharge of this part of his duty. If, in overhauling your tools and implements, there should be some that are not worth repairing, replace them at once by good new ones: or if you should, after a careful examination, determine that you have not enough to carry on the operations of the year, buy more; for every farmer should have enough of both tools and implements, of his own, to carry on his business without having occasion to borrow of his neighbor. It is among the pleasant duties of neighbors to loan to each other in cases of emergency; but no man has a right to tax the friendly feelings of a neighbor, by purposely depending upon him for the means of cultivating his land. The ability to interchange favors of the kind carries its reward with it; but still, there is such a thing as riding a free horse to death. Place yourself, therefore, in a position to be able to help your neighbor, rather than to rely upon him for help.

Cropping.—Do not pitch your crops beyond your ability to cultivate them well. Spreading your cultivation over many broad acres, without having the means of doing justice to each acre in cultivation, seldom, if ever, turns out to profit.

Hauling out and preparation of Manure.—It should be an object with every husbandman to get his manure, intended for spring crops, hauled out and in place as speedily as the state of his grounds will admit of it; and as the power of the sun is sufficiently strong to excite fermentation in manure after it may be carried out and deposited on the ground, and an escape of its volatile gases may be anticipated, it would be well, in order to prevent loss from this cause, to mix a bushel of plaster with every twenty loads of the manure, as it is being about to be shovelled into the wagons. By pursuing this course, the sulphuric acid of the plaster, from its affinity for ammonia, will assimilate with it, form the sulphate of ammonia, and thus what was previously volatile, will become fixed, or, in

other words, those fertilizing properties of the manure which, from their nature, are liable to be lost, would be arrested, and placed in a condition to be gradually taken up by the roots of the plants, as they might need such aliment in the course of their growth. One load of manure thus treated, would be worth two which might be carried out without the addition of plaster; and, as there can be no doubt of this assertion, the cost of the plaster, and the labor of mixing it, should not be permitted to prevent any farmer from thus preparing his manure before he has it hauled out.

Now, by pursuing this course, this advantage will result: the farmer may commence hauling out his manure to the ground intended for his corn much earlier than he otherwise could, as, by fixing the ammonia in the way proposed, he has but little to fear from loss, by escape into the air, of its fertilizing elements; and should rainy weather occur, these would be taken up and absorbed by the rain water, and carried by it into the earth, to await the demands of his contemplated corn crop. Surely, then, if two or three weeks time may be thus gained, the expense of a few bushels of plaster should not be regarded as a tax; for the convenience of being able, without detriment to the quality of the manure, of taking it out to the place of use, in advance of the ploughing time, in the spring, when so much has to be done within the compass of a short period, is an advantage of great moment; it is, in fact, a virtual elongation of the hauling season.

Barley.—The time for seeding this grain is as soon as the frost is out of the ground to allow of its being put in good order. The land should be a friable soil, and should be deeply ploughed and thoroughly pulverized by the harrow. As poor lands do not suit barley, he who may design to grow it, should be sure not to waste his seed by sowing it on such lands. Two bushels of seed to the acre is the proper quantity. It is an excellent grain to sow clover seed with.

Winter-killed Grain Fields.—These will be benefitted by a gentle harrowing and rolling.

Corn Planting.-As our journal circulates through the South, where corn planting has already commenced, we will express the hope that our Southern friends will, where the ground may be thin, provide manure for their corn fields, plough the land deeply, harrow it well, and cultivate the corn as well afterwards, not forgetting that ashes, lime, marl, plaster and bone dust are excellent ingredients to add to their barn yard or other manures.

Orchards.—Look through your fruit trees; cut off all dead limbs carefully; smooth the wound off nicely, and apply the plaster we recommended last month, or one composed in the proportion of 1 lb. pitch, 1 lb. rosin, ½ lb. beeswax, ¼ lb. turpentine, the whole to be gently melted over a slow fire—the wounded part to be dressed with it, and then to be covered with thick paper or cotton cloth. If your orchard has not been manured within the last four years, treat it to a dressing, as advised in our February number, p. 273. If it has never been limed by you, spread thereon 50 bushels of lime, or 100 bushels of marl, or 200 bushels of shell mould, per acre.

Milch and In-calf Cows and Heifers.—Increase their feed and attention, not forgetting that grain slops or roots are necessary, in addition to their long feed.

Growing Stock, of all kinds.—Besides fodder, hay and straw, these should receive, daily, a feed of chopt oats.

Meadows.—If your meadows are tight bound, as soon as they become dry enough to resist the poaching of your teams, harrow and roll them. If you have not recently manured them, spread on each acre, previously to harrowing, 5 bushels of ashes, and 8 bushels of bone earth, or 50 bushels of marl.

Planting out young Orchards.—Do you design setting out a young orchard this spring? If so, prepare to go to work as soon as the frost is out of the ground. In the first place, if the ground is not *very rich*, it must be manured. Less than 20 double horse cart loads of manure should not be applied. As to the kind, see our paper upon the subject, p. 273, February No.; and recollect that, if the land has been long in culture without being limed, you should give it a good top dressing of lime or marl, as fruit trees require to be fed with calcareous matters as well as nutritive manures.

Ingress to Fields.—If your ingress to your fields are by means of bars, substitute them by gates; it is true economy to do so.

Working Cattle generally.—Have these well cared for and well fed.

Mixture for Stock of all kinds.—A mixture of equal parts of lime, salt and ashes, should be given thrice a week to each head of stock on your farm, say at the rate of a gill at a time. In compounding this mixture, we prefer oyster shell lime to stone lime.

In-lamb Ewes.—These should get a gill of oats or corn meal daily, or an equivalent of roots, in addition to their hay, fodder or straw.

Sheep, generally, should always have salt in a trough under cover, to eat at their pleasure; they should be provided with pine boughs to browze upon. Where it may not be convenient to keep the pine boughs for them in their yard, they should have tar, in a box, sprinkled over with salt. They should also be regularly watered twice or thrice a day.

Breeding Sows.—These should be well cared for, and have generous slops given them during this month.

Store Hogs.—See that these do not want for any thing, and that they and all of the swine kind are provided with charcoal, rotten wood, ashes and salt—that they have fresh water at least twice a day—have comfortable bedding supplied them, in dry sleeping apartments, once a week, and that their yards are well supplied with raw materials, to be worked up into manure.

Tobacco Beds.—Let the planters see to these. For particular directions, we refer them to the admirable essays of Messrs. Bowie, Jones and Milburn, to be found in our December, January and February numbers. The practical experience and intelligence of these gentlemen eminently qualify them for the task of teachers.

Out Houses.—These should be cleansed and white-washed.

Poultry.—Give them lime, or old mortar, broken fine, to eat, sand and ashes to dust in, and feed them well, alternately with corn, oats, buckwheat, and boiled potatoes, mixed with corn meal, and they will not fail to lay you many eggs, and bring forth numerous young broods. If they have not access to running water, supply them twice a day with fresh water, in clean vessels.

Shade Trees—Shrubbery.—Is your house protected by shade trees? if not, plant some this month, as a home in the country looks desolate without them. Is your yard destitute of flowering shrubs? if so,

plant rose, lilac, snow balls and other flowering shrubs, as a court yard in the country, unless thus adorned, bespeaks a want of taste on the part of the proprietor of the homestead; besides, such adornments make a man love his home the better, to say nothing of the gratification it affords his wife and daughters—a consideration which should have an abiding place in every good man's heart.

In closing our hints for the labors of the month, permit us to sincerely wish that your enterprise, industry, and toils, throughout the year, may be crowned with triumphant success.

For the American Farmer.

Agricultural Readings and Reflections.

BY PATUXENT PLANTER.

The memorial to the Legislature of Maryland, by "*the Frederick county Farmers' Club*," is very important; and the report of Messrs. Baer, Tyler and Coleman, accompanying the memorial, is an able document. In this manner, agriculture is much more benefitted than by the exhibition of a fat pig, big sheep, or superior vegetables. The accurate and strict inspection of all articles sold the farmer, as means of renovating his exhausted soil, or as fertilizers to increase the product of his fields, is a most important thing to the agriculture of our State; and the subject is one of such moment as to require speedy and elevated legislation; by *elevated*, I mean not sectional or contracted legislation, which looks to power or patronage, or to individuals or particular sections of the State, but broad, comprehensive, philosophical and *practical* legislation. A law or laws should be passed authorizing the appointment of inspectors of all the various "manures and fertilizers which are articles of commerce;" and the requirements and provisions of such laws should be such as would encourage the manufacture of genuine articles, and the importation of *pure*, real manures, without even an attempt at fraud; and, at the same time, offer such inducements to the discoverer of fraud in these articles as would effectually deter the importers or manufacturers of them from being guilty of deception; beside, a high fine should be imposed upon the dealers or sellers of these articles, upon conviction of *their* having adulterated them when in their hands. This heavy fine should go, upon conviction of the offender, one half to the State, and the other half to the informer. *Then*, he who got *stones*, when he paid for *guano*, would be induced to publish and stamp with ignominy the man that dared perpetrate such gross fraud. If a farmer then bought high priced manure, he would know that he got a genuine article; and if he wanted a less active, or an inferior quality of guano, bone dust, &c., he would not have to pay more than what it was relatively worth, compared with the best of its sort. I rejoice to see such a move as our friends of Frederick have made; and its tone is so dignified, energetic and manly, I am sure the Legislature will not fail to answer the expectations of the whole farming and planting interest, which, to a man, would be pleased to see intelligent and efficient legislation upon this subject. It is a grave and weighty question. Hundreds of thousands of dollars are annually spent by our people in the purchase of these concentrated manures, one half of which are not worth the *transportation*. It is a fact not to be disguised, that one man will obtain a fertilizer, or a high priced article of manure, and it will answer his most sanguine expectations, while his friend will get some of the same seller, on the same day, at the same price, and have it brought to his home in the same conveyance, spread it and use it on precisely similar soil, in the same manner and at the same time, yet he will reap little or no benefit. This might so happen without any intention or design to defraud, on the part of the merchant who sold the article; for it is well known that the same cargo of guano will vary in its proportions—that is, two bags filled out of the same vessel will differ sometimes in value; therefore the necessity for a strict analytical inspection, so that the price may correspond with the character of the article. And against fraud, the farmers should, in addition to what the laws ought to afford, by way of protecting their rights and interests, resolve, and carry into practice that resolution, *to expose*, in big capitals, in the American Farmer, the name of any seller who was detected in selling stone for guano, or any other flagrant imposition. The bold and manly course of the State chemist has already saved much for the farmers, and secured for him the sincere thanks and commendation of thousands of his fellow citizens. As a general rule, it is a hazardous experiment for a farmer to buy any manure, unless he is satisfied, from analysis, or sure, unmistakable signs, what his land wants, and what crop it is best adapted to. He can then, with safety, buy that manure which contains those properties in which his land is deficient. He then wants to find a merchant who will sell the *genuine article*, or one according in price to its actual value. To make him feel safe, in these degenerate days, the laws must be stringent, and industriously enforced by such officers as are competent and active in the discharge of their duties. Let the name of every man who sells *stone* for *guano*, or who adulterates that article of manure which he sells as genuine, be published, in capitals, under the head of "*Imposter*," with black lines drawn around it, on the first page of the American Farmer, and, my word for it, the practice would soon cease. A man would pay a fine, and do the same dirty trick directly after, but he could not stand the public *branding*. Beside, it would put our fellow farmers on their guard. It is a course that I would assuredly adopt if I ever was deceived in such a manner as a great many farmers are daily.

The culture of the Parsnip.—I take the liberty, for the benefit of our lady friends, to extract the following from a private letter to me, received a short time ago, from an old and valued friend, who is one of the best practical farmers on the Eastern Shore: "Do you know that high, light *thin* land is best for the parsnip? In a modern celebrated English work, this fact was stated, and my son tested its truth. Such parsnips you never saw! It was stated in *the book* referred to, that the roots were not only large, but free from prongs and strings—the result of growing in fertile soil. My better half, with a view to the "show," had them planted in exceedingly rich earth; and when pulled up for trial—they were filled with small roots, and not fit to look at. You may rely on the above facts."

Brine.—Another excellent hint for our fair friends, I must give, from my intelligent correspondent, whose writings are not less agreeable than instructive. "Old Bordley, in his notes on Husbandry, says: "The rule of *brine* bearing an egg, may do for things to be soon used. But ought not a true

full pickle, for keeping meat, fish and butter, to be *boiled down* till the salt begins to crystallize. A slight scum on the top shows this whilst the pickle is yet over the fire."

Wheat Crop.—The very able article on this subject, by the Hon. Mr. Holcomb, of Delaware, in the January number of the Farmer, was, I venture to say, considered by all readers as the gem of that number. It proves, beyond doubt, that *it* is a safe crop (for men who wish to make money) to grow. It shows, too, that wheat must, in the nature of things, always command a paying, *living price*. Unlike *tobacco*, an article of luxury, it is one indispensable to man; it is his very life, at least of *Europeans;* and, crowding as they are upon one another in their native lands, enough are yearly flying from starvation, and seeking plenty and comfort in this broad land of liberty, equality and abundance, to consume enough of our surplus production of *wheat*, even if there were no *foreign* demand, to always command, in our home market, a fair *living* price for all that every industrious, *manure-spreading* farmer can raise.

The Patent Office Report is valuable—*very* valuable to a certain extent. But, in its estimates, it is sadly at fault. It makes it appear that a vast amount of *grain*, in the general, is raised more than can be consumed or exported. This is rank injustice to the farmer. It is absolutely *false*, because based upon false data. It makes no allowance for *waste*, or loss by many causes, such as accidents by fire, water, *or neglect*, by wild and domestic animals, rats, mice, weevil, fly, smut, and a thousand other depredators, from animalculi, too small to be seen by the naked eye, up to the bull or mammoth. It would seem ridiculous to reason thus to some, who, like the preparer of that report, is alone viewing the subject as a philosopher, or making his calculations arithmetically, according to the *Rule of Three*. But every practical farmer knows the immense loss that is sustained in the grain crop generally, from its ripening to its delivery and sale. I venture the assertion that one-twentieth is the loss: one-fortieth is the loss among the most careful, and one-tenth among the negligent; of the latter class, there is a majority, certainly; and hence I am *under* the amount when I put down the loss of crops at 1-20 in the aggregate. No such allowance is made in these arithmetical calculations; but a rich farm, in the hands of a careful, experienced farmer, in a rich section of the land, is asked what he makes per acre, and what is the amount of land put in wheat or corn, &c., each year, in proportion to his farm? and upon getting his answer, a man of figures sets down and makes the calculation, if A on 200 acres of arable land makes 500 bushels of wheat per year, and there are 500,000 acres of arable land in the State, query, how many bushels of wheat does that State produce per annum? If a favorable year, one-tenth or more is added to the product; if an unfavorable year, then a certain amount is deducted. This statement is taken by the millers and merchants as authentic, and they regulate the price accordingly. In Europe, it is looked upon as an authentic Government paper, and they, the European merchants, govern their transactions accordingly. I question much whether these Patent Office Reports have not worked more mischief than good so far. It looks well, upon paper, to show the *immense* resources of our country; but *justice* to the hard laboring producer ought to be done, by making, in these estimates, a proper allowance for *waste;* for the generosity with which grain is fed to the cattle of the American farmer, who feeds his stock not on roots and hay (as, perhaps, he ought to do), but on grain, and a proper allowance ought to be made for the prodigality with which the Northern and Southern man feeds himself, his household and his laborers—not on oat and barley *porridge*, but on the Indian cake and the wheaten loaf—his very *cur dog* consuming more grain in the year than a full-grown man in her majesty's LOYAL Island of Ireland. All this goes to show that it is greatly to the interest of the tobacco planter to diversify his crops. Make less tobacco, and thereby make it better, handle and manage it better, and get more for it on that account; beside, being less in market, the demand being the same or greater, a corresponding increase of price on that score would be the necessary consequence. Let more wheat, corn, barley and oats be raised, for they must always command a fair price, being *articles of necessity*. Let the tobacco planter grow potatoes, which would not fail to yield him from $30 to $50 per acre; grow roots to feed his horses, cattle, hogs and sheep upon, and sell his *corn* or wheat, or oats. One acre in roots will yield him, for cattle, more nutricious food, and keep in better order a larger number of horned cattle, than *three* acres of corn, or other small grain. Again, if our modern farmers would only raise large crops of roots, and manure the land for them as our forefathers used to manure for "turnip patches," we should soon have our whole land like a rich garden spot; for I well recollect when it was thought to be foolishness to sow turnips on any land that had not been manured or cow-penned until it was considered "*rich forever and eternity*," in the language of those good old days.

Important Suggestions.—Under this titling, in the January number of the Farmer, I observe you editorially announce the proceedings of the Charles county Agricultural Society. Are your readers to conclude that you consider it *important* to have wheat sold by *measurement* instead of *weight*? You at least make no dissent, and, therefore, it may be inferred you approve of it as an *important suggestion*.* Important to *whom*? The growers of wheat that falls below the present standard? Or did you mean to say, by *inference*, "look out, ye good farmers who raise wheat which weighs 66 lbs. running struck measure, or ye will be put down in the same balance with your light neighbors, who raise wheat at 50 or 56 lbs. per bushel." Weight is every thing now-a-days. If A makes 40 bushels of wheat per acre, weighing 60 lbs. per bushel, and B makes 38 bushels, weighing 65 lbs. per bushel, B would beat him as a farmer, because he would have more bushels by weight, and get a greater amount per bushel. The great object I have thought of late with farmers was to increase the *weight* of their products. It is seriously thought to be important, by most of the scientific and practical farmers of the present day, to ask the Legislature for a law requiring *all* kinds of grain to be sold by *weight alone*. Wheat and oats and corn and rye, which weigh heaviest, always command most in market, for seed. Why? Because it is known to be the best, bearing always a higher price, being capable

* We intended nothing more than to direct attention to the important suggestions made by a respectable society—those most interested, it was fair to presume, would feel sufficient interest to give their views upon the subject to their delegates in the legislature.—ED.

of making most flour, and possessing most nutriment. If it was not well known that our friends in Charles were most excellent farmers, it would be suspected that they raised a sort of prolific wheat, which did not come up to the standard weight required by law. I will confess that we who raise *corn* that comes up to the standard of *wheat*, as now fixed by law, are at a loss to conceive why this change is wanted by our Charles county friends. Our millers make a heavy deduction, as they *ought to do*, when wheat falls below 60 lbs. per bushel, struck measure; and they give more for wheat in proportion as it rises in weight above 60 lbs. The 2*d* resolution I highly approve of, and also the 3*d*; as to the 4*th*, I do not concur in it, because I do not see why commission merchants should not, as well as any other class of merchants, pay a license for carrying on their trade. And if the effect of the license be to preclude some of them, it is all the better, for we have too many now for the good of the planter. Ever since the establishment of warehouses in Baltimore, and the system of commission merchants, or *go-betweens* the planters and buyers, tobacco has been a drug. The *buyers* will not buy from a planter in person; they will not look at his crop, or make him an offer. Every man is bound to pay a merchant $1 per hogshead for selling his tobacco, although he may be there in person; therefore, I say, since this bad system has been established, it has "*worked to the disadvantage of the farming and planting interest of the State.*" Another time I may resume this subject, as it is of vital interest to the whole people of Maryland, either directly or indirectly. One thing is clear, that the commission merchants receive more commission than they ought to upon *tobacco* at least, considering the light weights and *low prices*. They charge $1 for a hogshead that brings $100, and the same on a hogshead which brings $12 only. But it is the poor planter's fate to be oppressed by all: he is taxed for internal improvements, and taxed for education, county charges, &c., and yet is not permitted to sell his own produce, or, what is the same thing, the system of agency has entirely excluded him from the market, through the *tacit* and *implied*, if not positive and concluded, *collusion* between agents and buyers. *Look to it, farmers.*

ON THE USE OF LIME.

To the Editor of the American Farmer.

I have, for a long time, been diligently engaged in agricultural pursuits, and an attentive observer of the practice of others in relation to the same object. I have also long since repudiated the doctrine that "book farming," as it is called, avails but little, and have accordingly very carefully perused many agricultural works and journals, in the editing of which much zeal and talent have been brought to bear on this engrossing subject. In some of these, as well as in both the practice and theory of many very intelligent farmers, I think I have frequently seen positions assumed which are in themselves unsound, and inductions drawn ostensibly from them, to the credit of which they are not always entitled; and when these are supported ingeniously by the opinions and arguments of individuals who occupy prominent positions as agriculturists, if erroneous, are calculated to mislead very many who are not careful to examine closely "the why and the wherefore" by which their decisions should be governed.

This much, I suppose, will be assented to by all. Whether my further remarks will be found worthy of equal credit, I must leave for others than myself to determine, and propose now to notice an opinion which I have often heard expressed—have often seen it adduced in publications having for their sole object the promotion of the farmer's interests—and which, in fact, judging from the manner in which we hear it reiterated from high places, seems to have obtained the very general assent of a large portion of the most distinguished agriculturists of our country, which is that, "in order to ensure success in the permanent improvement of his land, the farmer must necessarily, sooner or later, resort to lime as a fertilizer." Now, as relates to, perhaps, a large majority of farmers, this proposition appears to involve one or the other of two consequences. He must either undertake to do what his very limited resources must fail to effect, viz. make his land rich by the application of lime, or fold his arms and content himself with the certainty that both himself and his children must remain in poverty so long as they continue to depend upon agriculture as a means of support. Thus, to say the least, the prospect presented to his view is of a character well calculated to discourage him from making such exertions as would probably not only relieve him from a constant liability to despondency, but, in the end, crown his labors with success. If the conclusion be correct that lime is indispensable to give stamina to his land, and his purse is light, and he situated some ten or fifteen miles from lime, how is he to enrich his land in this way? Whoever will count the cost, must see at once that he cannot do this. It is my purpose to show that he can enrich his land by other, and for him available, means. First, let him adopt the motto, that "the diligent hand maketh rich;" let him carefully husband all the materials furnished by his farm that can be converted into manure, and make a judicious application of this to his land—let him use gypsum with every such application (for this every farmer can command); and let whatever little surplus he can spare from supplying the necessary wants of his family be laid out in the purchase of some one of the reliable concentrated manures. (Guano is, by far, the cheapest, and, therefore, the best for him, if he will plough it in well.) And my observation and experience have convinced me that he may make such improvement as will bring him a quick return, and soon enable him to get his farm well set in grass. This once effected, his facilities for its further improvement will assuredly increase in a ratio just in proportion as he is careful to pursue the course indicated.

If a farmer can succeed in getting his fields well set in grass, a large and long array of facts and experience have proved that he may then, under a judicious course of management, render them more and more fertile without foreign aid of any kind whatever. I would not, however, have this matter rest upon my own bare assertion, but will instance one case in proof (I could point to others). There now resides near the central part of Montgomery Co., Md., an individual, of the Patriarchal order, well known throughout the county, who, some fifty or more years ago, inherited a farm of some three or four hundred acres of land, and that not originally of the best quality in his immediate neighborhood, by large odds, which had been, for at least a lifetime before, subjected to the old system of cultivating tobacco, corn, &c. as long as such crops would grow unaided by manures, and until it was rendered exceedingly poor. The individual alluded

to, upon coming into possession (as I have often heard him say), could scarcely get clover to grow, on a large portion of it, high enough for a horse to procure his living from the pasture it afforded. He at once "abandoned the cultivation of tobacco," used all diligence in his efforts to increase his supply of manure from the materials furnished by his farm (which at first were scanty enough to have discouraged one of less than ordinary energy), sowed gypsum pretty freely, and soon ascertained that, as he was thus careful to make the most judicious application of these resources, they increased to such an extent, and with such rapidity, that, for forty years past, it has been one of the most productive farms in the county. All this, I know, has been done without the aid of lime, bone, guano or any of the chemical auxiliaries which are now available; none of which do I desire to undervalue in the least degree; but I am disposed to enter my protest, in the most decisive manner, against the position that "the application of lime is to be considered a sine qua non;" and without which, there is little to cheer the prospects of the farmer. My object is to remove a dark veil from before him, that he may distinctly see a prospect bright and cheering, over which no cloud of despondency lowers, and the sight of which will preclude every idea connected with a "forlorn hope."

This doctrine, that "lime is indispensable," has been proclaimed to such an extent, and with such apparent confidence and authority, that too many of us poor fellows, who cannot avail ourselves of lime as a fertilizer (for want of ability to meet the expense), have been almost ready to despair, or "faint by the way," for truly this lime bed has been held up to our view as though, if we were too long, we must be lopped; and if too short, we must be stretched upon it.

Here I would suggest that there is a danger of some of our farmers placing too much dependence upon manures that can now be purchased at a price that places them within the reach of very many, by means of the quick return they make for the outlay. In this, I conceive care to be necessary, lest they "lose at the bung, while they gain at the spigot," by neglecting to give such attention to the manure heap as its importance deserves, so long as they perceive the great benefits resulting from the application of the more concentrated manures. While we are doing well in the latter, let us not leave the former undone. Even should we be told that 200 lbs. of guano, used under the most unfavorable circumstances in which it could be placed, will afford a profit almost equal to the value of the land (per acre) over and above what 25 loads of barn yard and stable manure can do, still I believe we may rely upon the stercoracy and compost heap for aid in the premises that will "stand us in hand" when all others may fail.

The idea now attempted to be combatted appears to "stand in direct contradiction to general known agricultural experience;" and here, as in many other instances, a dogmatic adherence to assumptions are calculated to lead the agriculturist to arrive at false conclusions, and to adopt erroneous measures. The famous Doctor Zimmerman said that "all kinds of prejudices may be favored, through love to hypothesis; all phenomena may be bent at pleasure; we take from experience her rights; we no more hear her voice; we pervert her expressions; we are silent as to her victories; we see no more than we desire to see; instead of sacrificing hypothesis to nature, we sacrifice nature to hypothesis; one makes his observations from the desk, and imputes to nature his prejudices; others are so bewildered by the laws by which they retain their own health, and cure their diseases, that they wish to govern all men according to their laws; others, it seems, think a medicine must be regarded good in all cases, because it has been good in one.

If a physician hopes especially to see certain circumstances in a disease, he will certainly see these circumstances where he wishes, and not where they are, and we may soon mark through what glass he sees. I know a highly famous and greatly sought practitioner, who has obstructions in his liver, and he sees this obstruction in all his patients."

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LIME—GUANO—FISH, OIL, &c. AS MANURES.

NORFOLK, 5th February, 1850.

To the Editor of the American Farmer.

SIR: Will you be so obliging as to afford me information as regards the best plan for me to adopt as regards my land in its present state. About 22 years since, I purchased it, at which time it was perfectly sterile, worn out and worthless; but on using manure freely, I obtained large vegetable crops, in peas, potatoes, cabbages, melons, tomatoes, cucumbers, parsnips, &c. &c. I had in cultivation only about 24 acres, enough for a market garden; and, from a repetition of these same vegetables for 22 years, my production diminishes annually, with the same annual supply of stable manure, purchased from the city, and compost made at home, from hog-pens, farm pen and stables. My neighbors say my land is too rich now to produce these vegetables; but my own impression is, the soil is exhausted of the essential necessary to the growth of these vegetables. The object I wish to obtain is, do you know of any manures that I could use that would restore the fertilizing qualities lost? I have used lime and ashes freely; the latter still seems beneficial, but not to the extent as formerly. I have tried guano without success, but must have failed, not knowing how to use it. I see in your paper it is a general favorite; also bone dust, as well as many others. Many persons near me have the facility of catching a fish known here as alewives; they make a compost of them, which they find invaluable. My opinion is, that whale or fish oil might be used in a compost that would produce the same effect, as it is the oil of the fish, no doubt, that is valuable. Have you any knowledge how such a compost could be made with oil and the materials best to be used, and the quantity of each?

I have cleared up a fine thicket of old worn-out land, no soil, almost a blown sand. What manure would you advise me to use for it? I had dug up, the last fall, about 300 cart loads of mud from the head of coves, which I have had mixed with an average of one spadefull of horse manure to two of mud, with about the same quantity of lime as manure, all now in heaps, made about two months, which I have in contemplation to use on various crops as an experiment. For such land, what kind of manure would you recommend? Should you recommend guano and bone dust?

Very respectfully, your ob't serv't,

GEO. WILSON, SR.

I am informed bone dust, as well as guano, are both an excellent manure for Irish potatoes, as well as cabbages.

If the *quantity* of stable and other nutritive manures, which have, from time to time, been applied by our correspondent, has been sufficient to replace the nutritious matters which have been abstracted by the crops raised thereon for market, and consequently removed from his soil, and he has applied "lime and ashes," in sufficient quantities, we must confess our inability to account for the falling off in the products of his land. It may, however, result from the unfavorableness of the seasons; of this, he must be the judge. If he has grown the same vegetable upon the same portion of ground for a series of successive years, it may be that a *change* from one vegetable to another is what is needed. Our own experience teaches us that the same vegetable should not be grown two succeeding years upon the same land. We fear that we can prescribe no specific remedy; but we will observe that we have seen a portion of a market gardener's soil restored to a condition of productiveness, which, though it had been regularly manured, yearly, with full portions of stable and street manures, had failed, by the application of 100 bushels of oyster shell lime, and 100 bushels of ashes, to the acre, and then set in clover, and suffered to remain so for two years. If our correspondent has applied these quantities of lime and ashes, he may, possibly, find a curative in setting a portion of his grounds in clover, and permitting it to remain for a year or so; or, if he cannot spare his lands that long from the growth of market truck, he might find a remedial agent in a crop of buckwheat, to be ploughed in, *just as it begins to flower;* and, we think, he would find a mixture of 6 bushels of salt and 1 of plaster, per acre, to be sown broadcast, at the time of seeding the buckwheat, productive of beneficial results. It may be, however, that, by changing the character of his nutritive manures, by substituting 8 bushels of bone dust and 300 lbs. of guano to the acre, for the stable and other manures, he would be able to produce a favorable change in the productive capacity of his soil: but whatever manure he may apply, he should plough deep, if not call to his aid the subsoil plough. The guano should be ploughed in; the bone dust harrowed in.

Fish is generally composted with marsh mud—the more clayey, the better, when intended to be applied to such light sands as our correspondent speaks of. Such composts have wrought wonders in Rhode Island, and on Long Island, N. Y., when applied to similar lands. *Fish* is better than oil, as the bones furnish a very desirable per centum of phosphoric acid, besides nitrogenous matter, eminently serviceable to vegetation. *Oil* containing the elements of nitrogen, as our correspondent suggests, is good to mix with vegetable bodies, as peat, marsh mud, the deposites of mud found at the heads of creeks, rivers, &c. Ten gallons is enough to mix with a cart load of the former.

The compost formed of mud, horse manure and lime, by our correspondent, ought to act well upon his old worn-out pine lands.—*Ed. Am. Farmer.*

A PRIZE CUP FOR POTATOES.

"Pomona," Washington Co., Dis. Columbia, January 21st, 1850.

To the Editor of the American Farmer.

Dear Sir: Having, for some years, been a patron of your very valuable paper, and having, a short time since, become a "tiller of the soil" of one of the poorest farms in the vicinity of Washington, adjoining the handsome and highly improved estate of Francis P. Blair, Esq. I have, of course, taken a lively interest in every thing written on the subject of agricultural improvements and advancement—of renovated lands—of the most economical and permanent manures—of fertilizing exhausted soils—of the most profitable crops—of large products, &c.

It is not long since that I saw, in your paper, notices of some extraordinary sized potatoes, raised by some of your subscribers and contributors—some that you pronounced very fine in appearance, delicious in flavor, and excellent in quality; and, assuming epicurean attributes, you pronounce them the "ne plus ultra" in the potatoe line. I myself planted some of the best Maine Mercer potatoes. A few of them grew to an enormous size, some of them measuring between seven and eight inches in length, and nine or ten in circumference, varying in weight from a pound to a pound and a half, and in quality equal to any I have ever seen.

My object in thus trespassing upon your time is, through the columns of your truly useful paper, to instil the spirit of emulation into some of my brother farmers—a feeling laudable in itself, and conducive of the most beneficial results to the worshippers of Ceres; and I design effecting my object in a manner calculated to redound to the benefit of not only those who embark in it, but those even who deride the idea that farming is a science, and openly predict that the disciples of book farming will eventually come to, what the books originally were, rags. I say, then, that the proposition I have to offer will have a beneficial result on that dogmatic and self-opiniated portion of the fraternity, who, to their shame be it said, evince too clearly the spirit of the "dog in the manger," and, forsooth, will not allow others to do (without their officious prophecies) what they are unwilling to do themselves.

And now to the proposition; and let us see if we cannot make "self-preservation" their first law of nature, and convince them that *they must* emulate *us*, or abide their defeat and its consequences.

What I have to propose is, simply, that any number of persons, within the State of Maryland and the District of Columbia may enter into competition, by a *cash* contribution of *one dollar* each, to be deposited with yourself, and any agents you may appoint, and to be expended in the purchase of plate, to be awarded (by a committee appointed for the purpose) *to him* or *her* who shall produce and exhibit, at the next agricultural fair, twenty-five of the largest potatoes—a description of the "modus operandi" of the preparing, planting and growing of them, to accompany every sample exhibited; and *all* the surplus of potatoes (after the award) to be given to you for your trouble.

I have now given you an outline of what I propose; and if it meets with your approbation, the details of the same will be the subject of another letter.

I, therefore, conclude this preface, by tendering you the compliments of the season, and wishing you the same success in your praiseworthy endeavors that attends those who *read* and *digest* the result of your labors.

Very respectfully, your ob't serv't,
D. Clagett.

[We concur in Mr. Clagett's proposition, and accept the agency proposed, but think he should extend the area of competition to the farmers of other States.—Ed. A. F]

CULTIVATION OF POTATOES.

Early Potatoes.—The culture of this vegetable, when properly attended to, results in more profit than almost any other crop that the farmer can occupy his ground with, notwithstanding its heaviness and bulk, and the cost of its transportation to market. But, unfortunately, there is no crop which is put in the earth, generally speaking, that is more neglected. In the first place, it is often stinted in manure; and secondly, suffered to be overrun with weeds during its growth. We have seen many potatoe patches so overtopped by rank and noxious plants, that had we not been so told, we would not have known that potatoes were growing there. And then again, but little attention is paid to the kind of ground in which they are grown, and quite as little to its preparation. Potatoes being rapid in their progress to maturity, and necessarily voracious feeders, should, in the first place, have the ground well prepared to allow the roots easily to expand, and the tubers as easily to form; and in the second place, their food should be not only ample in quantity, but so suitable in quality as to afford a continuous and congenial supply of such nutritive and mineral manures as are adapted to their vegetable structure, and to the full development of their productive capacity.

Soils.—Grass-swards and Clover-lays are the best places to grow them in, and the generally received opinion is that loams are the most suitable spots for them; but so far as our experience goes—and we have grown them in all sorts of soils, we do not think the kind of soil so very important, provided it be a dry sound one and be put in good order, as the very largest crop we ever grew, was the product of a stiff clay; but we reduced it to a state of desirable friability, by ploughing, cross ploughing, harrowing and rolling, and took care to give so full a dressing of manure, both vegetable and mineral, that the potatoes could not possibly lack food at any period while they were growing—a matter which we deem essential to success; for we hold it to be consistent alike with common sense and phisiology, that a growing plant should have its appetite gratified, whenever its hunger may be excited into the desire for indulgence, and that every deprivation it may meet with, but serves to retard its advancement, curtail its powers of development, and lessen its product.

Preparation of the Ground—Deep Ploughing we conceive to be of the utmost importance to the success of raising potatoes. Where the soil may not have been rendered deep, by thorough previous cultivation, and fears may be entertained on account of turning up the under soil, the subsoil plough should be used, to break up and render the earth beneath the surface soil, subservient to the action of the air, make the descent of the roots of the vines easy, and pass off the water, as it may percolate through the earth, in order that it may not remain to stagnate and impede the healthful growth of the plants. If a *grass-sward* or *clover-lay* be selected for the potatoe ground, it would be well that the roller should precede the harrow, to prevent the disturbance of the sods. In such case, the harrow should be run lengthwise the furrow.

Modes of Cultivation.—Some plant the sets in every third or fourth furrow, merely covering the sets with the sod. This saves time, but by such process it is impossible we believe to put the land into that fine state of tilth that it should be, and in which we like to see it; though according to well sustained reports, large yields have been thus had. Growing potatoes in hills, is a very productive plan, but one which involves much expense in hand hoeing. We have raised them in hill culture on a small scale, was pleased with the result, and but for the amount of labor involved, to keep them clean, we would think more favorably of this plan; but as economy in labor should be studied and practiced by every farmer, we think he studies it best, who cultivates the potatoes in rows, as nearly all the working can be done with the plough.

Distance of Rows.—If the soil be good and plenty of manure be spread in the rows, 30 inches may be considered a good distance for the rows to be apart, though as a general rule, 3 feet apart is preferable, as it allows of more ample space for the team and ploughman to operate in, and more room for the action of light and air.

Preparation of the Sets.—These we have usually cut so as to leave two eyes to each; always selecting the best and the largest potatoes for seed; and it was our custom to change our seed every second year. As we cut the sets, we cover the cut part with either ashes or plaster; this serves to dry the wound and prevent the escape of the juices, and to that extent, increases the vigor of the plant, besides contributing, in a small degree, a very essential ingredient in its reproduction. The sets after being cut or plastered, should be spread out on the floor of a cellar and suffered to remain there at least a week before being planted, to give them time to dry; this precaution tends to prevent their rotting in the ground.

Depth of Furrows.—The furrows should be 6 inches deep, so as to allow room for the manure, for the sets and for covering.

Manure.—Barn yard and stable manure, say five double horse cart loads of each, formed into a compost, with 10 bushels of ashes and 1 of plaster, forms an excellent dressing for an acre of potatoes, when manured in the rows. The same number of loads of barn yard manure and marsh mud—salt marsh mud the best—equal quantities of each, formed into compost with 5 or 10 bushels of ashes and 1 of plaster, is also excellent. The potatoe being what is called a potash plant, that is a plant which a very considerable portion of potash is necessary for the perfection of its structure, ashes should always, if to be obtained, form a part of the manure applied. It is possible that *two* bushels of *unslaked* ashes would answer for an acre. If barn yard manure or stable dung should be scarce, 10 loads of marsh mud and 50 bushels of marl, will do very well, provided the marl has had the advantage of a winter's frost, and the compost be made a few weeks or months in advance. This however, would be greatly improved, by the addition of a few loads of horse dung, to excite fermentation. Four hundred pounds guano, mixed with ten double horse cart loads of woods-mould and leaves, and 1 bushel of plaster, would also form an admirable compost for an acre of potatoes. So would that quantity of guano and 1 bushel of plaster.

Manuring and Planting.—Strew the manure along the bottom of the rows, 2 or 3 inches thick, place the sets 10 inches apart in the rows, eyes upward,

and cover with the plough or hoe, just as may best suit your convenience.

Time of planting Early Potatoes.—This must be regulated by the location and the season. As a general rule, however, it may be assumed as a safe practice, to plant so soon as the frost may be entirely out of the ground. We have on one occasion planted as early as the 20th of March, in a dry warm situation, the soil being a light loam; and we have known them planted as early as the 17th of the month, and do well; but as we have premised, the time must be regulated by the *season*. Early potatoes may be continued to be planted throughout April.

After culture.—If planted in stiff soil, it is a good practice to run the harrow over the rows as soon as the plants *begin* to show themselves: this opens the soil to atmospheric action, warms up the earth; ensures a good stand, serves as a working, and destroys many weeds. If planted in light soils, this process is not so necessary; but even there it will be productive of good. When the plants are well up, say two or three inches high, plough a furrow from the rows, and return it so as to leave a slight flat hill: in two weeks plough again, increasing the size of the hill: in two or three weeks more, repeat the ploughing, taking care to still increase the size of the hilling and preserving a tolerably flat surface. If at any one of these workings —which are all that are necessary, the plants in the rows are not freed from weeds and grass, these must be removed by hoe and hand. If weeds appear between the rows, these may be expeditiously removed by the cultivator. At the first working of the potatoes, it was our custom to sow broadcast over the vines and rows, a mixture of 2 bushels of salt, 2 of ashes, 2 of lime and 1 of plaster, per acre.

We have in the beginning of this article advanced the opinion, that the texture and character of the soil were not matters of moment, the soil being well prepared, liberally manured, and the potatoes well cultivated. This, in a qualified sense, we feel justified in saying, is true; that is, so far as *quantity* is concerned, we believe that *more* potatoes can be grown in a good sound well wrought clay soil, than in any other; but then they are neither so sweet or mealy, nor will they come to maturity so early. For *early* potatoes, we prefer a light soil, say a sandy loam; and for this purpose, it is not so important that it should have been either in grass or clover. For late potatoes, however, we should always select, if we had the option, land either in the one or the other, and particularly so, if our object was to grow potatoes of fine flavor for the table. For such purposes, new ground is probably the best of all others. We recollect one year of raising an acre of most excellent potatoes on an old cow pasture, that had not been ploughed before for twelve years; the ground was naturally thin—a sandy loam—had been overworked and turned out to recruit; in manuring the potatoes, we acted upon the belief that it had not been benefitted much by rest, and therefore, manured highly, cultivated nicely, and as a consequence, reaped our reward.

Quantity of seed per acre.—As some kinds of potatoes have more eyes than others, it is impossible to say how many bushels will plant an acre; but generally speaking, from 12 to 15 bushels will answer—the great object being to secure to each set at least two eyes. It is said, that that part of the potatoe that forms the *crown* will produce tubers from 10 to 14 days earlier than any other part. If this be true, it would be an object for those who desire to have them *very early* for market, to use this part of the potatoe for that purpose.

Yield.—As to the yield of potatoes, that is a thing which depends upon many circumstances, as the preparation of the soil, its character, the appropriateness and quantity of the manure applied, the kind of potato, the culture, and to the season as much as any thing else. In former years, the *average* crop was rated at 400 bushels, at a later period, two hundred bushels per acre, at a still later, at 150 bushels, and since the appearance of the rot, no calculation could be safely made of *average* products, and he who made a hundred bushels to the acre felt that he had raised a good crop; few growers reaching that point, while many did not save from the effects of that vegetable pestilence, more than from 30 to 60 bushels, and in numerous instances the whole or nearly the whole crop rotted in the ground. But as the disease has well nigh abated, the farmer has a right to hope for more fruitful yields; and under a favorable concurrence of circumstances—in auspicious seasons, in good soils, well manured, well prepared, and as well cultivated, we do not see why from 300 to 400 bushels to the acre may not be calculated upon. We do know, that the latter quantity has been raised upon that quantity of ground, and as what has been done, can be done again, no farmer should despair of its accomplishment; but on the contrary, set himself to work with the firm determination to raise that number of bushels on an acre.

Gen. *Barnum*, of Vermont, many years ago, raised a thousand bushels to the acre; but his process of culture involves so much toil and hand labor, that we doubt the economy of growing them after his plan. His mode was this:

He ploughed, harrowed and rolled the ground, so as to bring it into a state of perfect tilth, having previously prepared a rich, light compost for the purpose of manuring, and raising the rows as the plants should require it. In planting the sets on the *surface*, he had them covered two or three inches deep with the prepared compost. When the plants came up and had grown to the size of 4 inches in height, he caused his men to go through the patch and place along side of the rows a sufficient quantity of the compost to form a slight hilling; at the second and third workings, the hillings were increased and effected in a similar way, the compost, thus smothering the weeds immediately near the plants, generally, while the rest were removed by the hand. The middle of the rows were during the season, kept clean by running the cultivator through them.

For the American Farmer.

DIVISION OF FIELDS, AND ROTATION OF CROPS.

Appomattox Co., Va., Jan. 14, 1850.

The best rotation of crops and division of fields is a most important subject for every farmer. I was much pleased with the three shift system proposed in your December No., by a writer from King George Co., Va., in which the greatest objection against the three shift system, viz. that the corn after clover is destroyed by the cut worm, is obviated by letting clover follow corn, sowing it when the corn is laid by, and fallowing clover for wheat.

A very improving system is proposed in your January No., by P. from Prince George Co., Va.

dividing his land into sixteen lots. He does not say whether it is his intention to *fence* his lots separately. If so, the expense of enclosing such a large number of lots would be very great; and the system seems rather too complicated for general adoption. Permit me to suggest what appears to me a more simple division of his farm, and which, with one single unimportant deviation, would give the same rotation. The only change in the rotation would be that the crop of peas would follow clover, and be followed by wheat, instead of following clover by wheat, and wheat by peas. Instead of sixteen lots, let the arable land, which is said to be nearly square, and to contain 400 acres, be divided into four equal lots of 100 acres each, by a good fence, one of these (instead of 4 lots of 25 acres each) to be devoted to hoe crops each year, viz: one half of the lot, 50 acres, in corn, to be sown in clover when the corn is laid by; ¼ in tobacco, and ¼ in peas; the tobacco and peas to be followed by wheat.

The rotation for one lot of 100 acres would then be as follows:

1st year:	½ Corn,	¼ Tobacco, ¼ Peas.
2	"	½ Clover,	½ Wheat.
3	"	½ Wheat,	½ Clover.
4	"	½ Clover,	½ Clover.
5	"	¼ Tobac., ¼ Peas,	½ Corn.
6	"	½ Wheat,	½ Clover.
7	"	½ Clover,	½ Wheat.
8	"	½ Clover,	½ Clover.

This system would give, as in that proposed by P., 50 acres for corn, 100 for wheat, 25 acres for tobacco and sweet potatoes, &c., and 25 acres for peas, and 200 acres for clover.

Table of Rotation of Crops, 4 Lots.

	Lot No. 1.	Lot No. 2.	Lot No. 3.	Lot No. 4.
1st y'r	½ Corn, ¼ Tobacco, ¼ Peas.	Clover, [Peas.	½ Clover, ¼ Wheat,	½ Clover, ½ Wheat,
2 "	½ Clover, ½ Wheat,	½ Corn, ¼ Tobacco, ¼	Clover, [Peas,	½ Wheat, ½ Clover,
3 "	½ Wheat, ½ Clover,	½ Clover, ½ Wheat,	½ Corn, ¼ Tobacco, ¼	Clover, [Peas,
4 "	Clover,	½ Wheat, ½ Clover,	½ Clover, ½ Wheat,	¼ Corn, ¼ Tobacco, ¼
5 "	¼ Tobacco, ¼ Peas, ½ Corn,	Clover,	½ Wheat, ½ Clover,	½ Clover, ½ Wheat.

The fifth year commences a second rotation, and is of course the same with the first. In this rotation, the different hoe crops may vary in any proportion you choose—¼ in corn, if desirable, Peas omitted.

This course might easily be changed, if desired, so as to give 150 acres each year in wheat, and 150 in clover, by fallowing for wheat the half of each lot in the above schedule in which clover follows clover, which would combine, in some degree, the three and four shift systems, being less scourging than the three shift, and allowing 50 acres more land for cultivation, each year, than the four shift. I would suggest, also, that the three shift system, proposed by your correspondent, in your December No., might be rendered more ameliorating, if circumstances would allow it, by leaving a portion of the poorest part of the corn shift uncultivated, and in clover, each year, which would then have the benefit of 2 years in clover before being fallowed for wheat. Say each shift contained 133 acres, if 33 acres of the corn shift were left in clover, there would be 100 acres in corn, 133 acres in wheat, and 166 in clover, each year; or, if it was not desired to have any portion 2 years in clover, wheat might be sowed on wheat stubble, on 33 acres or more of the shift for corn, giving 100 acres corn, 166 wheat, 133 clover. I tried wheat, this year, with good success, on land that was in wheat the year before; and, though it is not correct in theory to grow the same crop for two successive years on the same land, yet I believe it decidedly better to cultivate a part of your land two years in succession in wheat than in corn and wheat. The five shift system is pursued by some of our most successful farmers, which gives 2 lots in clover, 1 in corn on clover fallow, and 2 in wheat. One of the lots in wheat is on clover fallow; the other (part of which may be devoted to oats) follows corn. B.

SOWING SEED—IMPROVING THE CHICKEN GRAPE.—A minister of the gospel, in Cecil Co., gives us the following useful hints and calculations:

"I see frequent directions to sow one bushel, one peck, two quarts, &c. per acre, but how is the handful to be regulated so as to sow that amount and neither more nor less? I have made a calculation, the results of which you may publish if you think proper. Supposing the width of land to be 3½ yards and the double step 1½ yards, then each handful will be spread over 5¼ square yards. Divide the square yards in an acre, 4840, by 5¼ and you will have 921.9 or nearly 922 as the number of handsful required to sow an acre. One bushel contains 256 gills. This divided by 921.9 gives nearly 2777 or a little over ¼ gill to the handful when one bushel per acre is sown. Hence to sow per acre

2 bushels	take	.5554	gill per handful
1 "	"	.2777	"	"
½ "	"	.1388	"	"
1 peck	"	.0694	"	"
½ "	"	.0347	"	"

Dividing 4 gills by .5554 will give the numbers of handfuls to the pint when 2 bushels per acre are sown, and so by the corresponding decimal for any other quantity. Thus 4 gills divided by .0694 gives nearly 58 handsful to the pint when 1 peck per acre is sown. By taking a pint say of clover seed and dividing it into 58 equal portions or 1 gill into 14½ equal portions, you will have in one of these portions the quantity to be taken into the hand at one time to sow 1 peck per acre. By taking the proper quantity in the hand several times a person may learn from feeling so to regulate the handful as to sow at least nearly the desired quantity per acre.

I had in my garden when I bought it a chicken grape vine. This I cut off just below the crown and grafted the roots with the catawba, tying the grapes with a little wrapping yarn, and moulding a lump of clay around the place of junction. This lump I buried in the ground, leaving two or three buds of the graft exposed to the air. They took beautifully and grew to the length of about 10 feet the first season. How easily might these worthless vines, found on almost every farm, be made to produce the catawba, Isabella or some other valuable variety of grape."

AMERICAN FARMER.

BALTIMORE, MARCH, 1, 1850.

TERMS OF THE AMERICAN FARMER.

$1 per annum, in advance; 6 copies for $5; 12 copies for $10; 30 copies for $20.

ADVERTISEMENTS inserted at $1 per square of 12 lines, for each insertion. In case of the continuance of an advertisement for six months or longer, a liberal deduction will be made.

Address, SAMUEL SANDS, Publisher.

At the *State Agricultural Society Rooms*, No. 128 Baltimore st. over the "American Office," 5th door from North-st.

THE APPEAL, in this day's paper, addressed to the Agriculturists of the Middle States, is an able production. It addresses itself alike to the interests and patriotism of the Agriculturists of *Maryland, Pennsylvania, New Jersey, Delaware, Virginia and North Carolina*, and cannot fail to arouse them into that action, which always ensures success. We bespeak for it a careful reading from all, and, on our own part, indulge the fond hope, that its adjurations may light up a zeal and interest among the husbandmen in the several commonwealths appealed to, that will show, when yeomen strike for a good and a holy cause, that that cause must prosper.

DR. HIGGINS' REPORT.—We are indebted to the Hon. D. W. NAILLE, for a copy of Dr. Higgins, the State Chemist's report. We regret that our pages are pre-occupied, or we should have taken great pleasure in laying portions of it before our readers; we shall however, commence its publication either in whole or in part, in our next number. We have not yet read it entire; but in looking cursorily through it, we have seen enough to convince us that it is an able document, evincing talents, industry, and skill, and containing much well arranged matter that will prove eminently valuable to the agricultural community.

The Legislature have authorised the publication of 8000 of this report, and we learn that private orders have been given to the printer for a very large additional number. Those who would desire to obtain a copy, should lose no time in applying to the delegates from their county for them.

We are also indebted to the Hon. Mr. Constable, for a copy of the same document.

HUSSEY'S REAPING AND MOWING MACHINE.—We call attention to the advertisement of our fellow townsman, Mr. Hussey, who is now ready to receive and execute orders for his Reaping and Mowing Machine. We *may* be biassed in our judgment in behalf of this invention of our friend Hussey, but we think we may with full confidence say, that from all the evidences which have come under our observation, it is a superior machine to every thing of the kind that has ever been presented to the public.

The act of Incorporation for the State Society, has passed both branches of the Legislature.

The act of incorporation for the Md. Institute for the promotion of the Mechanic Arts, and a resolution appropriating $500 annually in aid of its funds, have likewise passed.

TO CORRESPONDENTS.—We must beg the indulgence of our friends. Notwithstanding, from time to time, we publish supplemental sheets, at a heavy expense, to keep up with the press upon our pages, yet we find our inability to give one half of the valuable matter prepared for every number, which we desire to lay before our readers. Besides several communications before announced, we have received a valuable paper from Wm. Dodge, Esq., of Washington Co., Md., on the culture of the cow pea for green manure, which was prepared at our special request. It was received after such arrangements had been made for the present number as to preclude its publication, without great inconvenience. It will certainly appear next month.

The reader will find, on another page, the promised communication of Mr. Buchanan, on wire fences. The prices of the different sizes of wire were given in Mr. Dobbin's paper on the same subject, in the 1st No. of the present volume; and it will be seen by Messrs. Parker's advertisement that they can furnish the article. We have received another communication from Mr. B., with a drawing descriptive of an ornamental wire gate, and also his experience corroborative of Mr. Stabler's views of the advantages of oxen over horses, for farm purposes. It shall appear in our next.

We have also received, from Thos. E. Blount, of Sussex Co., Va., a drawing and description of a machine for raising marl, furnished in obedience to a request made in our last, which, for similar reasons given above, we are compelled to lay over until next month.

We have still another essay, which we intend publishing, on the cultivation of tobacco, which we were extremely anxious to insert in this No. It is from the pen of Wm. J. Blackistone, of St. Mary's Co., Md.; and though last of the series, it may not be found the least in value. As we have already devoted much space to this subject, in justice to other matters requiring immediate attention at our hands, we are compelled to defer its publication for the present.

We regret having to announce our inability to publish the prize essay on farm buildings. We expected to have received the report of the committee at the meeting of the State Society, on the 6th ult., but it did not come to hand.

Our thanks are due to a valued friend for a copy of an eloquent address delivered before the literary societies of the College of New Jersey, by Hon. Jno. Thompson Mason, of Washington Co., Md.—We had marked, for insertion in our pages, an extract from the address, being a beautiful tribute to the profession and character of the farmer, which we are reluctantly compelled to defer to our next.

MORGAN HORSE BLACK HAWK.—The Morgan Horse, purchased by Col. Carroll, in Vermont, has reached his new quarters at Daughoregan Manor, near Ellicott's Mills. Gentlemen who are judges, pronounce him one of the finest horses ever introduced into the State. It will be seen by the advertisement that the number of mares to which he will be let is 30, of which 20 are engaged.

THE FARMER AND MECHANIC—This periodical, published in the city of New York, is devoted as well to the interests of husbandry as to the mechanic Arts. It is issued once a week, at $2 per annum, and will be found extremely useful for the scientific man as well as the farmer.

THE AGRICULTURAL BUREAU—AGRICULTURAL INTERESTS.

We are highly gratified to find *that the proposition to establish an Agricultural Bureau*, by the General Government, meets with so much favor in the public mind; but, when we reflect upon the importance of the measure to the well being of the Union, we are only surprised that such a governmental department had not been provided at the very commencement of the government itself. Its necessity was seen by that peerless Patriot and Statesman, *Washington;* and hence, in his first message to Congress, we find the agricultural interest warmly commended to the fostering care of that body. All admit that agriculture is *the* great interest of the nation—nay, that it is the foundation of civilization itself, as, without it, the arts could not exist; and yet, the statutes of our country present the mortifying fact, that agriculture is about the only interest that can be said to be *neglected* and overlooked by our law-givers. This is *unnatural* and *unjust*, in whatever way we may consider the subject. In a numercial point of view, those engaged in agriculture, comprise at least seven-tenths of our entire population; they contribute fully in that ratio to the revenue of the government; to their industry, and their enterprise, as the producers of the raw material of those commodities of traffic, which form the mediums of exchange between our country and others, we are indebted for the basis of our national wealth. In times of war, the sons of the rural population go forth to battle for their country, with strong arms and brave hearts, animated by the most lofty sentiments of patriotism; they never stop to inquire for what purpose the war had been declared; it is enough for them to know that their country is involved in peril.

It is not our purpose to point out the objects to be attained by the creation of the *Agricultural Bureau*; those objects are too obvious to need it, and their *detail* is the province of others. But we will here seize the occasion to state, *that the conservation of the agricultural interests, require* MORE *than the establishment of an Agricultural Bureau.* THEY REQUIRE ALSO, AN APPROPRIATION OF A PORTION OF THE PUBLIC DOMAIN, FOR THE PROMOTION OF AGRICULTURAL EDUCATION—THE ESTABLISHMENT OF AGRICULTURAL SCHOOLS, WHERE THE SONS OF FARMERS AND PLANTERS, MAY BE THOROUGHLY INSTRUCTED IN THOSE ARTS AND SCIENCES CONNECTED WITH THE CULTURE OF THE EARTH IN ALL THEIR PHASES AND APPLICATIONS. Such appropriations, and such establishments are demanded by the public interest, and as emphatically looked for, by the great body of the American husbandmen. It is futile to meet this demand by the old hue and cry, that the power for such grants is not to be found in the constitution; for our statutes are filled with *precedents*—with appropriations of the public domain made to States and territorial governments, for educational purposes. These appropriations are all right, and we only recur to them now, to say, that if *they* be right—and we have conceded the point—it *cannot* be wrong to make similar grants of a more enlarged and general character; but on the contrary, that the universality of the benefits to accrure from the appropriations we advocate, place them more immediately within the meaning and spirit of the constitution, which looks to the general welfare of our whole people, as being among the first objects and aims of the goverement. If it be constitutional to endow a few, or any given number of States or Territories, with the common property of *all*, it certainly comes within the beneficent operation of the law making powers, to extend their endowments so as to embrace the entire body. Schools have been established for the education of the officers of the *army* and *navy*, though there is not a word about such establishments in the constitution, and surely, if there be power to teach men, at the expense of the public treasury, the most scientific mode of cutting short the thread of human life, the power *must* be existent in the same instrument, whence that power is derived, to establish schools, to instruct the tellers of the earth how to preserve the soil in the freshness and fertility in which it was received from the hands of God. If it be constitutional to educate men for the purposes of devastation and war, it cannot be otherwise, to instruct them in the pursuits of peace, it cannot be unconstitutional, to grant to the States a portion of the public domain, to enable those engaged in tilling the soil, to labor in their vocations with knowledge, to add to the sum of human happiness, by increasing its necessaries and comforts of life, and augmenting the national wealth.

We call upon the Representatives of the people in Congress to meet these questions with the broad and comprehensive views of enlightened statesmen, casting aside those contracted notions, which prevent their doing good to the whole; and we pray them to believe, that all legislation which tends to elevate the agricultural mind, serves to increase the national wealth, to enhance the tone and character of our people in the estimation of the other nations of the earth, and to clothe our republic in the panoply of true greatness.

STATE AGRICULTURAL SOCIETY OF VIRGINIA.—The Convention which assembled at Richmond on the 20th ult. was called to order, and Col. Tho. M. Bondurant, of Buckingham, appointed Chairman. The Constitution for a State Society was adopted, which provides for the election of a President, 32 Vice Presidents, 2 Secretaries, &c.—An adjourned meeting was to have taken place on the 22nd, to appoint the officers.

DORCHESTER COUNTY.—We see by the Cambridge papers that a meeting of the farmers of Dorchester Co. was to have been held on the 25th ult. for the purpose of taking into consideration the propriety of forming an Agricultural Society for that county. Judge Goldsborough, and J. Wallace, Esq., were to have laid before the meeting, the details necessary for the organization of the association.

MEETING OF THE BOARD OF MANAGERS OF THE STATE AGRICULTURAL SOCIETY.—The meeting on 6th ult. was but slimly attended, in consequence of the inclement state of the weather.

Chas. B. Calvert, Esq., President, took the chair at the appointed hour, and stated to the Board, that in pursuance of the resolution passed by the annual meeting, duplicate prizes were to be awarded to certain agricultural productions therein provided for. The prize of $5 for the best five acres of hay, was accordingly adjudged to Mr. Geo. E. Brooke, of Montgomery. The certificates of Mr. B. were all in due order, signed by Wm. H. Farquhar, surveyor, and John Stabler and R. S. Kirk, who state that the five acres were a fair average of the whole field, and that the yield thereon was 14 tons and 1723 lbs.; that there had been no rain for a long time previously, and that the hay was perfectly dry. The following statement was made by Mr. Brooke:

The field of 23¼ acres from which the above five acres was laid off, had a coat of lime of from 40 to 50 bushels per acre on the greater part of it previously to being put in corn in 1845. It was manured with stable manure and about five bushels bones per acre, in the fall of 1846, and seeded with wheat and timothy. The crop about 23 bushels wheat per acre. Clover sown the following spring. And in 1848 a heavy crop of hay was cut. The foregoing certificate shows the result on the 5 acres in 1849. It may be proper to state that the last crop in consequence of the clover running out, was nearly all timothy hay. Geo. E. Brooke.

To Col. Capron was awarded the prize of $10 for the best 5 acres of corn. [The particulars of this crop, for which Col. C. was awarded the prize at the Prince George's Co. Exhibition last fall, will be found stated in the Jan. No. of the Farmer, page 244.]

All other applications were decided as not entitled to the prizes of the Society under the rules.

On motion, the Corresponding Secretary was instructed to draw up and present a memorial to the Legislature, asking the aid of the State to this Society, and the names of the officers were directed to be affixed thereto.

The following gentlemen were appointed a committee to proceed to Annapolis, to ask the passage of a law by the Legislature, for the better protection of sheep from the ravages of dogs, viz. Messrs. Calvert, Prest., Jno. Glenn, V. P., Col. N. Goldsborough, Dr. Wharton and Geo. W. Dobbin.

The Secretary was directed to give notice, that a general meeting of the officers was particularly requested at the quarterly meeting on the first Wednesday in May, for the purpose of deciding on the list of premiums for the Fall exhibition, and for the trasaction of other important business which will then require their attention.

The Board then adjourned to the above mentioned day.

WORTEN, KENT CO., MD.—We have received, from a correspondent, a very gratifying account of the progress making in this section of little Kent. Shell banks found in this vicinity are rendered extremely valuable by the demand for the lime. Our correspondent declares that there has been more permanent improvement going on within the last twelve months than formerly would have been done in twenty years! May the good work continue to prosper, is our earnest prayer.

DR. THOMSON'S ADDRESS.—We have just arisen from the perusal of the address delivered by Dr. *James W. Thomson*, of Wilmington, Delaware, before the Agricultural Societies of Talbot county, Md., at their Exhibition and Fair in November last. To say that the reading of this chaste and classic composition gratified us much, is but faintly to express our estimate of its rare merits. There is a propriety and adaptedness in all its parts—a grasp of thought, clearness of diction, and justness of deduction about it, that commends it to every discriminating reader. His compliment to that veteran pioneer in the cause of American husbandry, *John S. Skinner*, is as beautiful as well deserved by that able and faithful advocate of agricultural interests. For the third of a century, against every obstacle, against all sorts of prejudices, he has devoted the vast powers of his mind to elevate the condition of the rural population, and improve their interests, by teaching them how to improve their lands, and economise the fruits of their labor; and now, under the pressure of ripe years, we find him, with all the ardor of youth, still pursuing the same enlightened path of duty, striving, with a zeal that nothing can depress, to evoke the tillers of the earth to think, and, by thinking, to act as may become that class whose calling was called into being by the first Great Cause.

MOUNT AIRY AGRICULTURAL INSTITUTE.—We have received from Mr. John Wilkinson, Principal, a catalogue of this Institute, for the winter session, from October 1, 1849, to March, 1850, containing a list of the pupils, qualifications for admission, divisions of the literary department, remarks on the course of instruction, and on the practical course, in which the outline of the studies and pursuits of the pupil is given, in reference to his agricultural education. The location and advantages of the Institute are also pointed out, and the terms of admission given. The summer class commences first Thursday in April; the winter term in October. All such Institutes should receive the fostering care of those for whose interests they are established; and we hope that the principal of that at Mount Airy may realize a just remuneration for his labors and zeal.

SMUT MACHINE.—Millers will have their attention attracted to the advertisement of Mr. L. Smith of Troy, on our advertising pages. The model of this machine was exhibited at our late cattle Show, and a diploma awarded to the inventor. We have seen the medals awarded it by the N. Y. State Ag. Society, and by the American Institute, and as it has been introduced into several mills in this State, and neighborhood, those interested would do well to witness its efficiency.

We would ask attention to the advertisement of Mr. Taylor, offering his improved hames for horses' collars. We learn that the Balt. and Ohio R. R. Co. have adopted them for horses in their service.

LAND, MILL, &C. FOR SALE.—A bargain will be found in the land offered for sale by Mr. Newton. It is worthy the attention of an enterprising man.

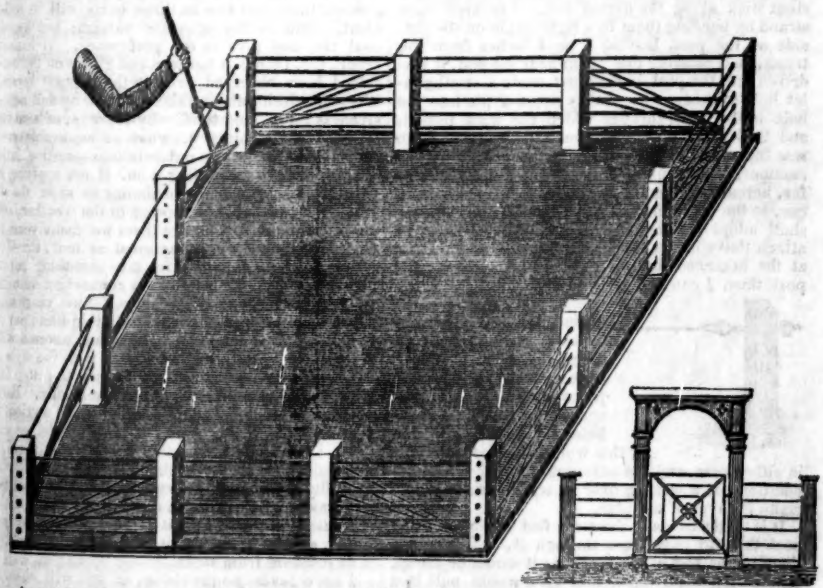
WIRE FENCES.

ELLENDALE, Virginia.

To the Editor of the American Farmer.

If you do not receive from some other quarter, in time for your next number, better information and instruction as to the cost and putting up of wire fence, in reply to the enquiry from Kent county, contained in your number for this month, you may, if you see proper, give the result of my experience.

As to cost, it will be found to be less than that of any other fence he can adopt; so, at least, I have proved it, though having at command, on my own premises, every description of timber, of fine quality, and in abundance, and labor and workmanship as cheap, I presume, as elsewhere. Mine, which I have lately put up, cost me less, when completed, than I pay for the getting out and setting up of ordinary post and rail, at 37½ cents per panel of 8 feet, and then I am spared the hauling of the rails, to say nothing of saving my most valuable timber, for sawing, building and other purposes, and have, besides, these serious considerations in fencing diminished on the posts, as their number and size may be considerably less than in the wooden structure. Your correspondent may easily make his own calculations upon these data. The posts may be set 12 feet apart, and need not be larger, with the exception of those at the beginning, angles and termination of his enclosure, than he would use for board fence. They may be got out in the same manner, unless he sees proper to square them with a broad axe, or sawed, if there be a mill convenient to him. The wire cost us, here, 8 cents per lb., of 20 feet to the pound; and six strands, for a fence 4½ or 5 feet high, will be sufficient, with or without boards at bottom; though, if pigs are to be excluded, these should be added, and they tend, moreover, to strengthen the structure. The larger posts, he could estimate at the cost of gate posts, or rather less. They should be eight inches square, with a heavy butt, to sink from three and a half to four feet in the ground. The boring of the holes for the wires should be performed with an instrument as near its size as possible, thus rendering it unnecessary to plug them after the fence is put together, and which I prefer to staples or any other contrivance, as costing less, and, by passing through the centre of the posts, giving the fence a better appearance than when attached to their surface, while it is more substantial in case of pressure against it from within. The adjusting, tightening and fastening of the strands—in short, the entire completion of the fence, after the posts are set—are matters of so little moment, that their cost is not worth considering; and having done these myself, with the occasional assistance of some member of my family, I made no account of them. If necessary to hire for these purposes, a man, with a boy to assist him, would put up several hundred feet in a day.



As to the construction of the fence, I have little to add to the remarks of one of your correspondents, Geo. W. Dobbin, Esq., in your number for July last. I have loaned this paper to a friend, and cannot, therefore, refer to it at present; but, from my recollection of Mr. Dobbin's description of his fence, it is about such as I would recommend, though I would add bottom boards, omitted, I think, by him: say 10 inches broad, 1¼ inches thick, and set within 2 or 3 inches of the ground, not only to make it more secure against intruders, but because, if well joined and nailed where they meet on the posts, they would act as braces to keep them upright, and prevent their drawing together when the wires are made tight. I differ, too, from him in my plan of staying the starting and terminating posts;

and instead of anchoring them, as the phrase is, and as he suggests, to a stone, would make their butts to answer the purpose of rendering the posts next to them immovable, while, at the same time, they served, by their size and weight, to aid in sustaining the whole line of fence, as thus:—To enclose a square, plant posts as represented in the accompanying diagram; then drive stout staples into each of the corner posts, close to the surface of the ground, and in line with the fence; from these, let there be four wires leading to the next post, on each angle, into which smaller staples must be driven to receive them, as near, for appearance sake, to the holes for the strands as may be, and be there made fast, after straining them to the utmost. Cut the wire to the desired lengths before they are attached, and heat three or four inches at each end, to anneal them, and make them bend round the staples in drawing, and be easy to fasten, by twisting them over the stay. Without this precaution, they will be very difficult to draw through the staples on the second post, and be apt to slip before they can be fastened. For this, as well as for drawing the wires tight, after they were passed through the posts, I used such a contrivance as is shown in the drawing, a hand vice, to which I attached a ring of wire; through this, a handspike was passed, one end of which rested against the post, and a force of one or two men, as occasion required, applied to the other, made the strand to be drawn very tight, and it was retained so until made fast, by putting a stout stick along the dotted line. I secured each strand by bending them to a right angle on the outside of the post, leaving 3 or 4 inches from the trunk, and, bending this again near the end, it was driven into the post, having first made a small gimlet hole to receive it. I then drove a pin into the hole in the post, through which the wire passed, and thus made it secure at each extremity. Such was the plan I pursued with the fence I put up last summer, and it answers very well; but I will prefer, hereafter, to make the wires fast, in this manner, at the beginning post, but, at the termination, shall adopt iron bolts, with an eye at one end, to attach the wire to, and a thread, nut and washer at the other, so that, by passing them through the post thus, I can not only adjust and tighten the strands more readily in the outset, but, in case they become slack, can draw them up without assistance. Mr. Dobbin proposes making use of bed screws for this purpose, as being of little cost; but this would be inconsiderable in either case, and the advantage, in force and expedition, of a wrench over a screw driver would make in favor of my plan.

It is better to make the stays fast to the adjoining post than to pass them through it, and continue them on, as part of the fence, as it would be found, on drawing them tight, that they would pull that post, as well as the corresponding one next the extremity, inwards, or have a tendency to draw the outside posts out of the ground. This might be obviated by making them fast, by pinning, in the holes of the second post, but would leave the whole strain on that next the last, at least until it was made fast to the corner, where there would be difficulty in securing it, with such tension on it; whereas, by making them fast, as I have directed, and then commencing the horizontal lines at the first post, and securing them at the last, and then pinning them in the adjoining posts, all these risks are avoided, and the solidity of the starting and terminating points very much increased by the addition of the weight and size of the corner posts. To make security doubly sure, I would have, in a long line of fence, a piece of timber connecting the first and second posts, at each corner or terminus, at top, which, with the plank at bottom, would contribute very much to keep them in place, and accomplish, I think, the great desideratum in wire fencing—to have immovable points, to begin and end with.

Should small gates be required, as in enclosing a lawn, yard or garden, the posts should be some six inches square, 3 feet in the ground, and 7 feet above it, so as to admit of head room in passing under a cross piece uniting them at top. A piece of timber should also be closely fitted between them, on a level with the surface of the ground, like a sill; and with these precautions, a breach may be made in the fence without affecting its solidity; but, where large gates are required, and a heading would be inconvenient, stays will be necessary. The drawing shows the contrivance, in my garden gate, the small lines in which represent wire.

As soon as the fence is completed, the wires and staples should have a coating of linseed oil, boiled, for a few hours, with a little litharge in it, to make it dry quickly, which can be put on, with a rag, in a short time, and two or three coats will be sufficient. This is the scientific varnish; but I used coal tar, and give it the preference. It cannot crack, for, though it hardens and glazes on the outside, I have observed, even in the thinnest layers, it is soft within, and retains its tenacity and adhesiveness for a long time. By the way, of coal tar ("apropos de bottes"), what an admirable preservative it is for our out-buildings—costing little but the trouble of putting it on. I am applying it to my roofs, which are beginning to show the effects of sixteen years exposure to the weather, and doubt not it will preserve them for many years to come—nay, make them as good as new, for they will form as good a base for it as sheathing paper, now being used for roofing, in connection with gas tar, to the exclusion of shingles. Two years ago, I observed the roof of a small building I had put up as a play house for my daughter, and covered with poplar strips, as more in keeping with the style of the edifice than shingles, had become so rotten that it would not hold a nail, and leaked sadly. Being about to leave home for some time, and anxious to preserve this little temple of affectionate associations, I requested my brother to have it covered, in my absence, with tin or zinc. He thought it would be a fitting subject for experiment with coal tar, and gave it two or three coats, alternating with a sprinkling of sand, and it is now so hard you can hardly stick a knife into it, and the rain runs from it as it would from stone.

I have made no provision, as you will observe, for the contraction of the wires in my fence, from the effects of cold, as I apprehend no inconvenience from it—no force we are likely to apply being sufficient to render them so tense as to make the influence of this agent perceptible. There will always be kinks or crooks, in a long stretch of wire, that will yield, and lengthen it, by straightening out, before it breaks. The great difficulty is to keep it stretched tight. I have but two stays to each cor-

ner of my fence, of which one got loose, by accident, and the other has sustained the whole line of fence during the last six weeks, in which we have had some intensely cold weather; and during which, this stay was so tight that it would hardly vibrate under the hands. When I add, that my fence, though a light one, stands between my garden and 300 sheep, ravenous, at this season, for any thing green, of which there are still some remnants within it—has withstood the shock of a yoke of young and unruly oxen, running, full tilt, against it, without seeing it, on their way to the stable, and making no second effort to get through it—that it appears to have upon stock the effect of a magic line, which they graze up to without attempting to pass over it —I think I need trespass no longer on your valuable columns, in commendation of wire fencing, except to plead, in apology, for any error to be found in my views of the matter, that I had never seen nor read of such a construction before I attempted one, nor since, except my own, and the communications of Mr. Dobbin and Col. Capron, sent to me last autumn, after my fence was completed. By the way, the plan for running the wire off the coil, described by the latter, will be found to save much trouble; and the contrivance he promises to furnish, for taking the kinks out of it, would be of great advantage, as it would very much diminish the difficulty of drawing it tight, and its strain upon the posts, arising more from its disposition to resume the curve, in which it is put up for transportation, and the crooks it receives in handling, than from its weight. Yours, W. B. B.

January, 1850.

BARTLETT'S DOUBLE PLOUGH.

To the Editor of the American Farmer.

Within the last few months, several notices and statements have been published relative to this implement. One of the plows was on trial and exhibition at the Maryland State Fair, in October last, and from all I can learn, I think there is much advantage gained by the use of this plough. The improvement consists in the combination of two or more ploughs so connected that each accommodates itself to the inequalities of the surface, and if there are obstructions that one of them meets with, it passes over the same as readily as a single plough, without much if any disturbing the action of the other. If one of them is partially thrown out of the ground, the other assists to bring it to its place again. The tendency is to steady each other, which makes it very easy for the ploughman, and in smooth land, it will run a considerable distance without getting out of place, even with no one touching the handles. When properly guaged, the furrows are of uniform depth and width, and the surface is left more even than is generally done with a single plough. It of course takes more force to plough two furrows than it does one, but the team and ploughman travel only one half the distance, and in many of our light easy soils the team used for a single plough is sufficient for the double plow, here the saving of expense is about one half. Another advantage is obtained in ploughing wheat or fallow lands where it is desirable to pulverise the soil by ploughing *fine furrows*, the resistance being but little, if any more with two furrows of 6 instead of one of 12 inches; and this desirable object is attained without any additional expense.

My attention was now drawn to this subject by noticing in the Baltimore Patriot a copy of a letter by Mr. Webster, which I should be pleased to see transferred to the columns of your valuable paper.

LETTER FROM HON. DANIEL WEBSTER, ON THE DOUBLE PLOUGH.

Marshfield, Dec. 8, 1849.

William O. Bartlett, Esq.

Dear Sir:—In June last an experiment was tried on this farm with one of your Double Ploughs, on a piece of land intended for turnips, somewhat rocky, with a hard sward, not having been ploughed for many years, and many bunches of bushes growing upon it. The plough appeared to work well, and Mr. Wright, who has been our principal farmer for many years, was greatly pleased with it. The furrows were as well laid, I thought, as they could have been by any single plough. Mr. Taylor, who lives on my farm in New Hampshire, wishes me to send him a Double Plough. His land is level, rather a rich loam, and entirely free from stones. He thinks that with a Double Plough, and a pair of horses, with a light hand to hold, he could quite easily plough three acres a day for many days in succession.

It struck me, when seeing the Plough in operation, that one part steadied the other, and made the work smooth and even. The saving of labor in the use of the Double Plough is too apparent to need remark.

I might add, that my turnips were never more cheaply cultivated, and never yielded so good a crop. With much respect,

Your ob't serv't,

DAN'L. WEBSTER.

"CHAPPELL'S SALTS."

To the Editor of the American Farmer.

Please give this communication a place in your March number.

On looking carefully over the experiments with Chappell's salts, as reported on page 261, by "Northampton," I have come to the conclusion,

1. That *oats*, sown *as late as the 25th April, on "poor sandy land,"* did not give the salts a *fair chance*, particularly in a latitude so far South as Eastville, Va. The flourishing appearance of the oats for "6 weeks," fully satisfies my mind that the fertilizer had a very favorable effect; and had the oats been put in a month sooner, no doubt the crop would have been much larger than it was, and consequently the "return" of outlay very much increased. If I am not greatly mistaken, the advice given in *this journal* has been *always* to get *oats* in as early in March as the weather will permit—that the farmer will in vain look for a large crop of oats unless sufficient time is given for them to mature, by early sowing.

2. It would have been more satisfactory to those who might wish to profit by the experiments of "Northampton," if he had recorded the state of the weather, for it is impossible to form a correct opinion as to the remunerative value of the "salts" in the absence of this information; it is one of those important "circumstances" which every writer should notice, and record, when reporting his experiments for the benefit of others. Even rich land, *in a dry season*, will not yield as large a crop as land which is much inferior, *in seasons favorable to the crop*. Sufficient moisture is necessary to develope the virtues of *all* manures, particularly

"Chappell's salts;" hence, I recommend their *early* application in the spring, to give time for their solution. The drought, so continuous last spring and summer, extended over a large extent of country, and it is likely the farmers near "*Eastville*, Va.," suffered from this cause.

3. I am not surprised to hear that the "*clover* starved out on the dressed as well as on the undressed land." The failure I attribute to the same cause, viz: too late sowing. Should the same piece of land, this year, show that the salts were not all abstracted by the crop of last year, and, without any additional manure, should yield a "good crop of *oats* and *clover*," your correspondent will, I am certain, then acknowledge that he has been fully "repaid for his outlay." If he will get his oats and clover in by the 15th to 20th of March, he will try the experiment with greater probability of success. I hope he will do so, and report the result.

4. The experiment on *corn*, on "poor sandy land," from the description given, appears, under the "circumstances," to have done tolerably well; and I am led to think that, if the salts had been *harrowed in* before planting, and the season more favorable, a larger yield would have been obtained, and the outlay fully refunded the first year, if not even more remunerative.

5. An experiment, on so small a scale as half an acre, is not sufficient *data* by which to form an opinion of the value of Chappell's salts, *on corn*, in *Virginia*, or any where else. Some of the most respectable and intelligent farmers have informed me that their *first* experiments with *guano* were by no means satisfactory or remunerative. Subsequent experience has *shown* the "circumstances" necessary to be present to secure success; time will do the same for "*Chappell's salts.*"

6. Though your correspondent does not appear altogether satisfied with the result of his *first trial*, I hope he will not be discouraged; and in penning this article, I am actuated by the best of feelings towards him. His report is certainly of advantage to all interested in the use of Chappell's salts, as it states *some* of the "circumstances" where its action failed. Now, if I am correct in stating the causes of the failure, I hope this communication may prove of service also.

7. Before closing, I will mention one case only of the successful use of the salts on *corn*. Mr. Owen Reisler has given me a certificate that he obtained *fourteen bushels of corn additional yield per acre*, from the use of 300 lbs. per acre, by actual measurement. Let us see *if he* got back the outlay the *first* year. He used twenty-four barrels, which cost $72, and gained by its use 336 bushels corn, which, at 50 c. per bushel, amounts to . $168 00
From which, deduct the cost 72 00

Leaving a profit of $96 00

This, certainly, was a very successful experiment; and it gives me much more pleasure to hear that its results prove thus profitable than to find any farmer disappointed in its use. The same disappointment frequently attends the use of guano and other manures. Time only can develope the *causes* of failure and of success.

Yours, respectfully,
P. S. CHAPPELL.

INSPECTION OF WHEAT.—A bill introduced into the House of Delegates of this State, to require wheat to be inspected, was rejected by the decided vote of 18 yeas to 43 nays.

PLANK ROADS.

The construction of Plank roads is at this time attracting much attention, and several charters have been granted to Companies in this State for their construction. To show how far they have been successful elsewhere, we give the following statement, copied from our exchanges, of the results of investments for a similar purpose in the State of New York:

The Waterville and Utica road, nineteen miles long, and costing $34,000, has just declared a dividend of ten per cent, payable to the stockholders on demand, ten per cent laid by for repair.

The Utica and Bridgewater road, twenty miles long, and costing $40,000, pays twenty five per cent regularly.

The Boonville road pays twenty-two per cent.

The Watertown road pays twenty-five per cent.

The Forea and Johnson road, four miles long, and costing $8,000, pays regularly fifteen per cent.

A cotemporary remarks, that "there is one gratifying fact in relation to plank roads which cannot be said of railroads, canals, steamboats, banks, or any similar stocks, and that is, that those who have been interested in plank roads and watched their progress have learned, by experience, that no plank road has ever yet been constructed that proved a losing concern to the stockholders. Experience has shown too that the people will seek these roads and will use them: and, unlike many of the railroads, they are enterprises invariably as beneficial to the stockholders as to the public."

In New York, although only introduced in 1846, between four and five hundred miles it appears have been constructed. The subject is already attracting a great deal of attention in the Northern States, and a Supplement to the work of "Gillespie on Roads and Railroads" has recently appeared in New York, from which we make some extracts:

Plank roads were introduced into Canada by the Governor-General, Lord Sydenham, who had seen their utility in Russia. In 1834 the first one was there constructed (leading from Toronto eastward,) and since then five hundred miles of them have been there built. In the U. States, the one from Syracuse to Central Square, N. Y., led the way, being finished in July, 1846; and its great success has already caused the construction of four or five hundred miles in this State, and the projection of twice as many more in it, and in New Jersey, Ohio, Michigan, Wisconsin, &c.

In the most generally approved system, two parallel rows of small sticks or timber (called indifferently *sleepers*, *stringers* or *sills*) are imbedded in the road, three or four feet apart. Planks, eight feet long and three inches thick, are laid upon these sticks across them, at right angles to their direction. A side track of earth, to turn out upon, is carefully graded. Deep ditches are dug on each side, to ensure perfect drainage; and thus is formed a Plank Road.

LAYING THEM OUT.—In laying out a plank road, it is indispensable, in order to secure all the benefits which can be derived from it, to avoid or cut down all steep ascents.

A very short rise of even considerable steepness, may, however, be allowed to remain, to save expense; since a horse can, for a short time, put forth extra exertion to overcome such an increased resistance; and the danger of slipping is avoided by descending upon the earthen track.

A *double* plank track will rarely be necessary. No one without experience in the matter can credit the amount of travel which one such track can accommodate. Over a single track near Syracuse, 161,000 teams passed in two years, averaging over 220 teams per day, and during three days 720 passed daily. The earthen turn-out track must, however, be kept in good order; and this is easy, if it slope off properly to the ditch, for it is not cut with any continuous lengthwise ruts, but is only passed over by the wheels of the waggons which turn off from the track, and return to it. They thus move in curves, which would very rarely exactly hit each other, and this travel, being spread over the earth, tends to keep it in shape rather than to disturb it.

COVERING.—The planks having been properly laid, as has been directed, should be covered over one inch in thickness, with very fine gravel, or coarse sand, from which all the stones or pebbles, are to be raked, so as to leave nothing upon the surface of the road, that could be forced into and injure the fibres of the planks. The grit of the sand soon penetrates into the grain of the wood and combines with the fibres, and the droppings upon the road, to form a hard and tough covering, like felt, which greatly protects the wood from the wheels and horse's shoes.—Saw-dust and tan-bark have also been used.

The road is now ready for use.

LAYING.—The planks should be laid directly across the road, at right angles, or "square," to its line, as shown in Fig. 115, b, on page 230. The ends of the planks are not laid evenly to a line, but project three or four inches on each side alternately, so as to prevent a rut being formed by the side of the plank track, and make it easier for loaded wagons to get upon it; as the wheels, instead of scraping along the ends of the planks, when coming towards the track obliquely after turning off, will, on coming square against the edge of one of those projecting planks, rise directly upon it. On the Canada roads, every three planks project three inches on each side of the road alternately.

COST.—The Syracuse and Central Square plank road, 16 miles, cost $1487 per mile, with timber at $5.50 per M. It has a single 8 feet track, except over a few spots of yielding sand. The Rome and Oswego road, 62 miles, cost $80,000, or about $1,300 per mile; lumber costing from $4 to $5 per M.—It is of eight feet hemlock plank, three to four inches thick; with grades cut down to 1 in 20 near Rome, and at the western end, where it is more hilly, to 1 in 16½. The Utica northern road, 22 miles, cost $42,000, (besides $8000 for the right of way over a turnpike,) being $2000 per mile, five miles being a new line cut through woods, at an extra cost for clearing, of $500 per mile. Deduct this, and the average cost would be about $1800 per mile. A short road near Detroit, eight feet wide, laid on a travelled roadway, cost with lumber at $6 per M. $1,500 per mile.

DURABILITY.—A plank road may require a renewal, either because it has worn out at top by the travel upon it, or because it has been destroyed at bottom by rot. But, if the road have travel enough to make it profitable to its builders, it will wear out first; and if it does, it will have earned abundantly enough to replace it twice over, as we shall see presently. The liability to decay is therefore a secondary consideration on roads of importance.

WEAR.—The actual wear is of course proportioned to the amount of travel. The most definite results have been obtained on the first New York road, that from Syracuse to Central Square. In its first two years, ending July, 1848, more than 160,000 teams passed over its first eight miles. This travel wore its *hemlock* plank down *one inch*, where they had not been floated. Another inch could be worn down before the projections of the knots would make it necessary to relay the road, so that it would have borne the passage of 320,000 teams. But this is an under estimate, inasmuch as the wear and tear of the first year is more than that of several following! since the first travel upon the road tears off the outer splinters and fibres cross cut by the saw, while the coating subsequently formed protects the plank from wear. Upon a Canada *pine* road, travelled over by at least 150 two-horse teams per day, (50,000 per year,) the road had worn down in two years only one quarter of an inch; and this too was attributed chiefly to its exposure the first year without sanding. It was estimated that sanded plank on this road would wear at least ten years. Oak would of course wear longer.

DECAY.—As to the naural decay, no hemlock road has been in use long enough to determine how long the plank can be preserved from rot. Seven years is, perhaps a fair average. Different species of hemlock vary greatly; and upland timber is always more durable than that from low and wet localities. The pine roads in Canada generally last about eight years, varying from seven to twelve. The original Toronto road was used chiefly by teams hauling steamboat wood, and at the end of 5 years began to break through in places, and not being repaired, was principally gone at the end of ten years. Having been poorly built, badly drained, not sanded and no care bestowed upon it, it indicates the minimum of durability. Oak plank cross walks in Detroit, the plank being laid flat on the ground, have lasted two or three times as long as those of pine. It is believed that oak plank, well laid, would last at least twelve or fifteen years. One set of sleepers will outlast two plankings. Several Canada roads have been relaid upon the old sleepers, thus much lessening the cost of renewal.

A Canadian Engineer thinks that $20 per mile would be required the first year, to restore the grade where it had settled, to fasten loose plank, &c. For the next year $10 per mile, and then there would be some planks to be replaced. The repairs would then increase so as to amount to a renewal of the surface at the end of four years more, making ten for the age of the road.

ADVANTAGES.—Plank roads are the *Farmer's Rail Roads*. He profits most by their construction, though all classes of the community are benefitted by any such improvement, as has been fully shown in the "Introduction" to this volume. The peculiar merit of plank roads is, that the great diminution of friction upon them makes them more akin to railroads than to common roads, with the advantage over railroads that every one can drive his own wagon upon them. Their advantages naturally divide themselves into two classes: their utility to the community at large, and their profits to the stockholders who build them.

1. TO THE COMMUNITY.—Taking as our standard of comparison the load which a horse can draw on a new gravel road, we find that while he can draw three times as much on a broken-stone or McAdam road, in the average condition, he can draw *six times as much on a good plank road*. A great degree

of speed can also be obtained upon them, with less injury to the vehicles and to the horses' feet than on a McAdam road. The motion has been compared to that on a road of well beaten snow.

1. To the Stockholders.—The annual profits of a plank road will of course be governed by the two elements of its first cost, and the amount of travel upon it. The latter should be approximately determined in advance. One important point has, however been determined with considerable accuracy, viz: how much a road will earn before it is worn out. Upon the first eight miles of the Syracuse and Central Square plank road, the tolls during its first two years, ending July, 1848, amounted to $12,900, and the expenses for salaries and repairs to $1500, leaving $11,400 for dividends and rebuilding. This amount of travel had worn the plank down 1 inch. Another inch could be worn down before a renewal would be necessary, and the road would then have earned $22,800 above all expences, or $2,850 per mile. This experience indicates that hemlock plank before being worn out, will earn three or four times their original cost.—The surplus above the cost of renewal will therefore be payable in dividends, amounting in gross to between 100 and 200 per cent upon the first cost of the *plank* (that of the *whole road* bearing no constant ratio to this,) the amount of *each* annual dividend being of course greater the more rapidly the wearing out, with its concomitant and proportional earning, takes place.

GUANO AND FARM YARD MANURES ON COTTON AND CORN.

Petersburg, Va., *January* 5, 1850.

To the Editor of the American Farmer.

Sir—I intend this year making a crop of cotton; I have accumulated a large quantity of farm yard and stable manure; would you apply it to the cotton crop? or would you purchase Guano for that purpose, and apply the farm yard and stable manure to the land intended for corn? In the application of lime and stable manure, is it not the best method to put on the manure first and plough it under, then top dress with lime and harrow it in, or would you spread the manure and lime on together and plough under? by answering these questions at your earliest convenience you will greatly oblige, a subscriber.

Very respectfully, Geo. Rives.

We deem it immaterial, whether the farm yard and stable manure be applied to the cotton or corn crop, it will suit the one equally as well as the other; so will the Guano—to whatever the Guano may be applied, 400 lbs. per acre is the quantity necessary to ensure a good crop, and with every 400 lbs. 1 bushel of plaster should be thoroughly mixed, and ploughed in to the full depth of the furrow, be that what it may.

If lime be applied, it should be sown broadcast on the top, and lightly harrowed in. If mixed immediately with either the barn yard or stable manure, its effect will be to injuriously force decomposition and drive off the nitrogenous gases, to the great detriment of the growing crops.

Editor American Farmer.

Gutta Percha Pipe.—In reply to our query upon this subject, we have received a communication from the Hudson Manufacturing Co. of New York, (181 Broadway) with a list of prices, from which we make the following extract.

"We can furnish it in lengths without joining, say from 100 to 200 feet, and by joining any length can be formed perfectly secure at the joining; they are easily joined and strong." "The above pipes have been thoroughly tested, and are confidently recommended as possessing decided advantages over metal. They will not burst by freezing, impart no poison or flavor to the water, repel all fluids, will sustain more pressure than lead of equal thickness, are much lighter and more cheaply put up."

Price per foot, for 1 inch pipe, 25cts. From the knowledge we obtained of the value of Gutta Percha for belting, &c. at the late Mechanics' Fair, held in this city, we have no doubt that it will be most extensively introduced for many purposes for which other substances have been heretofore used.

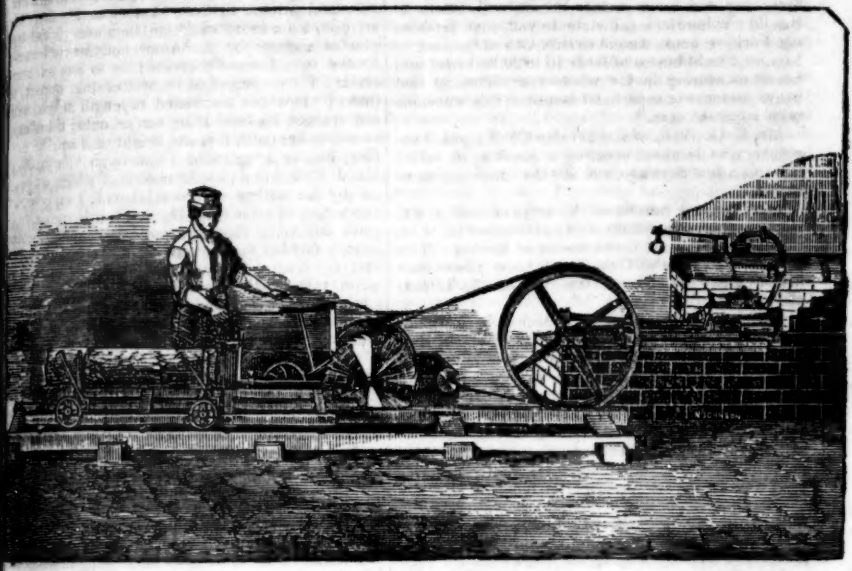
Instructions with drawings, for joining Gutta Percha tubes, accompanied the above, and can be seen at our office; they will, of course, be sent to any one desiring more particular information, by application as above.

Bartlett's Double Plow.—A communication showing the advantages of this plow will be found on another page. The Albany Cultivator, for Feb., speaks in high terms of it. It is a different implement, we learn, from the double plow introduced here some years ago, and, on light lands particularly, might be found very useful.

Mr. Newton on the Profits of Farming in Eastern Virginia.—Mr. Newton, apprehensive that his views upon the subject of his rotation may be misunderstood, has sent us some additional remarks to those published in our last, upon the results of his farming operations, which we annex:

"I did not mean to recommend the three "shift" system as best under all circumstances, and, therefore, did not say that there had been no *deterioration* of the land at any time under it; for, in fact, before I took possession, many portions of the farm had been greatly impoverished under this system. It was only by the use of lime, clover, and the most sedulous attention to collecting and applying putrescent manures, and the separate enclosure of the quick marshes for early pasture, that I could counteract the scourging effects of this rotation. I do not believe it possible to improve a farm, on the old three shift system, of corn, wheat and pasture, without a large supply of foreign manures. If clover can be substituted for pasture until summer, then the land, if not naturally poor, may be rapidly improved by the use of lime alone, in addition to the putrescent manures that may, by proper care, be made on the farm. No one rotation is the best under all circumstances. Every judicious farmer will adapt his rotation to the quality of his soil, its adaptation to particular crops, its proximity to market, &c. I prefer the three field system at Mount Pleasant, because a large portion of the farm consists of a deep black soil, not easily exhausted, and very productive in corn, whilst, without thorough draining and liming, it fails to produce abundant crops of wheat. On other lands, of less fertility, and drier, I greatly prefer the five field system, under which, with the use of lime, guano and clover, a rapid improvement may be effected at the same time that heavy crops of wheat are reaped. The foregoing explanation, is, perhaps, necessary to the proper understanding of my views."

PAGE'S IMPROVED PATENT PORTABLE SAW MILL AND STEAM ENGINE.



There has just been issued from this office a pamphlet containing a description of the Saw Mill, and other machinery made in this city by Mr. Geo. Page, whose well established character as an inventor and machinist, is familiar to many of our readers. Mr. P. will forward this pamphlet to any one applying (post paid) for it. A large number of the Saw Mills have been sent to various sections of the country, and a list of those who have purchased, with their residences is appended. Among the letters annexed to the description of the Saw Mill, is one from Col. T. H. Benton of the U. S. Senate, from Hon. Chas. B. Calvert, Prest. of the Maryland State Agricultural Society, Hon. P. Pendleton, of Martinsburg, Va., Joel Lupton, Esq. of Winchester, Va. and many others, all of whom testify to the capacity of the mill, from actual experience, each having been running their's for a length of time. The above cut represents the mill as propelled by steam power, which is furnished by the inventor; he has also a lever horse power, which is represented by good judges, as one of the most efficient made, which is mostly used for operating the mill. The portable character of this machinery renders it very important and valuable to holders of large tracts of woodland—and the facility with which this can be done, may be judged from the following sentence extracted from the letter of Mr. Calvert, whose mill has been operating for a number of years at his Riversdale estate, near Washington City. Mr. C. says:

"I believe that, if it were necessary, I could remove it twenty miles in a single day, with a team of four, six or eight horses, according to the nature of the road or ground over which it would have to be transported, and have it ready to operate within the course of the third day thereafter. When I look at it in full operation, see its wonderful powers, the ease with which it executes its work, I am struck with surprise, that a Machine so simple in all its parts had not been invented a century ago. It is, indeed, a labor saving, and time and money economising invention—one which, in my opinion, every owner of a woodland estate, every railroad company and shipwright, in the country, ought without delay, to possess themselves of. As it can be propelled equally well by steam, water, or horse-power, it will suit every location, and prove, in either, a machine of intrinsic value, whether regard be had to the saving of money or time, which latter is of equal value with the former. In new settlements, too, where there is timber, it would prove a God-send to whole neighborhoods, as it might be removed to any point where buildings might be reqired to be erected."

Mr. Calvert uses the steam engine of 10 horse power, and says that he has cut at the rate of 15,000 feet of lumber per day. Jno. B. Ricards, Esq. of this city, who has been erecting extensive buildings at Capon Springs, near Winchester, Va., says, that with steam power, the following astonishing result was produced, viz: 4,000 *feet in three consecutive hours actual running*. "Both my partners and myself (says Mr. R.,) are delighted with the performance of the saw, and are satisfied that without its aid we could not have finished, by next season, the very extensive buildings being erected there. All the saws which I have heretofore purchased for friends in Kentucky and Virginia have given great satisfaction; and one friend, on Licking River, Kentucky, has informed us that he will clear, by one mill alone, this year, upwards of $10,000."

Mr. Jno. Watchman, the well known machinist of this city, who was present at the performance of the mill at the Capon Springs, says:

"After finishing and putting to work the Engine and Mill, I remained several days to witness its performance; I therefore took an exact account of the

quantity cut in 6 working hours, and the greatest part of the timber was from thirty-five to forty-two feet long, and large timber, which was heavy to handle; I therefore can state to you, that in those six working hours we cut twenty-two of those long logs, and eight others of from 16 to 20 feet long into plank, measuring in the whole four thousand feet board measure or superficial measure; this was done with apparent ease."

Mr. E. G. Wall, of Rockbridge Co. Va., civil engineer, who is about erecting a plank road, called upon us a few days ago, and left the following statement:

"Joel Lupton purchased 28 acres of land at $35 per acre, and sold $3000 worth of lumber off of it, the land paying all the expenses of sawing. This was done with one of Geo. Page's horse power Saw Mills. I had the above statement from Mr. Lupton of Frederick Co. Virginia."

Mr. Lupton in his letter published in the pamphlet, after detailing the performances of the Saw Mill, says, that "*it gives entire satifaction in every respect.*"

We have deemed it our duty to our readers, to give these statements, referring them to the pamphlet for more minute particulars, believing that the introduction of plank roads will render this Mill particularly desirable in many sections of country.

The following are the prices of the Saw Mill and motive power:

Saw Mill, $300—band, canthooks, shipping, &c., $50, ...	$350	
Horse-power, largest size, for from 4 to 10 horses, ...	200	
		$550
1st Class Saw Mill for steam power, $700, other expenses, $157. . .	857	
12 horse steam engine and Boiler, portable, &c., ...	1370	
		$2227
2d Class Saw Mill for steam power, $500, steam engine, &c. as above,		$2027
3d Class Saw Mill for Steam power, $300, steam engine, $1000, and other fixtures, $304—total, . . .		$1604

Brinkleyville Vineyards and Nurseries,

AND COST AND PROFIT OF A SOUTHERN VINEYARD.

BRINKLEYVILLE, Halifax Co., N. C., December 26, 1849.

MR. SANDS: Having sent you an advertisement of articles offered the public from my establishment, I also forward you a communication, in offer for publication; and I hope it will meet with more success, in reaching you through the mail, than did one sent some months since.

Having contributed to the old series of the "American Farmer," it was not for want of inclination and entire approbation of the course of the new series in your hands that I have not oftener sent you communications; but great press of business, as a vintner and farmer, and constant calls for communications from my pen, further South, as say from Professor De Bow, editor of the "Commercial Review for the South and West," have caused my apparent neglect of you; and I may add, as another reason, the ill health and infirmities of advancing age. Yet, as long as life lasts, I trust I shall not cease my exertions to contribute my mite to the advancement of the great cause of agriculture, by the pen and otherwise, and especially the vineyard cause. My American system, as set forth in divers communications, in the "American Farmer," by my pen, I am more sanguine than ever is the true plan of success for the American vineyard cause. By the bye, I stand corrected as to any exclusive claim for one principal feature of this system, or that of vines not shortened in length in trimming, and trained on scaffolding for arbours; all clear of branches beneath, for, say height of 7 or 8 or more feet; for, in a splendid treatise on vineyards, by Mr. J. Fisk Allen (an impression of which was sent me by the author as a compliment, I suppose, for extracting of mine from De Bow), it is stated, from good authority, that, in some parts of Europe, the canopy fashion for supporting vines is in use, and that the frames for the canopies rest on rock or stone pillars—the distance of such pillars apart, nor any other particulars of the plan, not named. But, since I read the account, I adopted it for 2 Scuppernong vines, in my door yard, front of my office; and while sitting to write this, looking out of a window, I see a canopy covering an area 40 by 30 feet, supported by 4 rock pillars, each 2 feet square at base, and terminating, at height of 7 feet, a foot square, masoned up with sand and clay mortar, and pointed with lime mortar; resting midway on these pillars, are 4 oak poles, about 5 inches medium diameter, and bark taken off, two 42 feet long, and two 32 feet, and two of each length, crossing central of the area, and at the centre supported by a post set on a flat rock. In like manner, the corners of the canopy are supported where the 4 outside poles meet. The 4 areas of the canopy, each 20 by 15 feet, have thinner barked pine poles, the rise of 20 feet long, laid along lengthwise, on which, as well as on the first named poles, the vine branches rest. Some of the branches, however, ramify from off one side of the canopy into aspen shade trees, some 50 or 60 feet; and on the other sides, the branches extend some distance on scaffolding, held up by wooden posts, or such as held up the area of 40 by 30, ere it was forked up, and said support of pillars, &c. put instead. Under the whole, you see not a single hanging down branch, or nothing but the main vine stems, the rock pillars and the posts; and the greater part of the ground underneath covered over, first with a layer of oak and aspen leaves, collected in cleaning the door yard; and to keep these leaves from blowing away, they are covered with a coating, an inch or so deep, of pine leaves. The whole appearance is airy and beautiful, reminding one of the Bible description of gospel liberty times, when every man "sat under his own vine and fig tree, and none to make him afraid." Let it be observed, *under*, and not *outside* his vine; or the term *under* favoring the *canopy*, and not *stake* or *trellis* fashion of vineyards, as prevailing among the ancient people of God, in one of their most prominent branches of agriculture. *Theirs* seems to have been the *American system*, in the *canopy* respect at least.

But, from this digression, I proceed to remark, that rock pillars are very costly, especially if rock or stone is brought from a distance. After trying the four, I am using in their stead large oak posts, say a foot and more in diameter, of trees too knotty to split for smaller posts or rails; likewise, pine trees, bark taken off while standing, say 9 or 10 feet high, and left so awhile, or till coated over with turpentine: these are said to last longer than

k in the ground, or where posts most apt to give
ay; and pine poles, when barked, will last, in
ost situations, nearly as long as oak. And I fur-
her remark, that I find about a rise of 20 feet
les most convenient for frames, and all of cano-
es; and the large posts 20 feet each way, or when
bstituted for the smaller one of 10 feet (my dis-
nce of planting vines, except for Scuppernong,
d those at least double the distance), every other
lace; and the large posts I place at the *corners* of
e 20 feet square areas, instead of *midway*, as for
e area of 40 by 30 feet, as first named. I would
ere remark, that it may appear almost incredible
some that any grape vines should spread like
ose I have described; it is, nevertheless, true;
d none who know the wonderful properties of
is grape, will doubt the statements heretofore
ade, by others as well as myself, in the "Ameri-
n Farmer," that one single vine, in the lower
rt of this State, or the native place of the Scupp-
rnong, covers, on scaffolding, an area of near a
arter of an acre, and produces annually 5 barrels
wine, besides grapes for the owner and his neigh-
rs for, say nearly two months of their ripening in
ccession. Capt. Burlingham's rates of produce
r acre was 2,000 gallons, as likewise stated in the
ld American Farmer;" and I can say I have
oduced at same rates. A lady, one of my nearest
ighbors, has two vines running every way, some
0 feet into oak trees in her grove, that produce
ough grapes, yearly, for two barrels of wine.
bout 12 years since, I set the vines at the one side
f her husband's garden, and directed their training
utside upon trees in the grove. A very slight
affolding intervenes between the garden and the
ees on which the branches run. Said trees,
very season, are literally loaded with grapes—
carcely any cost attending these vines as to rear-
g; and as to their income, with a small outlay for
pirits and sugar, the wine is good for 60 dollars
nually, or a dollar a gallon. Her process of
aking is very simple: After mashing the grapes
d pressing, she puts in the juice a *fourth* of *spirits*,
d *one pound* of common sugar per gallon, and, in
few months, an excellent wine is the result. Ac-
rding to tenor of letters, and information from
st judges of wine, South, and to my own experi-
ce and judgment, the Scuppernong juice forms
e basis of the best of wines; but it is of a very
elicate as well as excellent nature; it is apt to
oil soon, if some safe-keeping, enriching ingre-
ent be not added immediately after it is pressed
t, particularly in hot weather, and out of a cool
ellar; yet, after becoming somewhat acid, through
d management or too little ingredients added, it
easily restored by adding sugar or spirits, or
oth; or say a fifth of spirits and half a pound of
gar per gallon will restore, after a few months
ixture, almost any wine not nearly vinegar, or
aving contracted a very bad taste. I have put
way Scuppernong juice in cool cellars without
y ingredients being added, and, in the course of
year or so, a fine vinegar was the result; but, at
crifice of all profit, or of scattering shrivelled
rapes, I have made wine with no safe-keeping
gredients. Double-refined white sugar added,
akes a most excellent Scuppernong wine; indeed,
is kind of sugar is peculiarly suited to mix with
e white delicate juice of this grape. Three
ounds per gallon I added for what I call my Scup-
rnong Madeira wine, bringing me three dollars
r gallon. It is as clear and limpid as water; and, from its exquisite taste, they call it, at Raleigh, our capitol, *nectar*. My Scuppernong Hock is also made with three pounds of doubly-refined sugar per gallon, and sells at 4 dollars per gallon. But for a barrel of this, I put about a bushel of black or dark colored Scuppernong grapes with about 7 bushels of the Scuppernong proper, or white, and ferment, say 24 hours, to give a beautiful red color to the wine, and I take additional pains in racking.

What I call purest Scuppernong wine, at 6 dollars per gallon, is made by reducing the juice to a syrup, or distilling the juice for brandy, and mixing other juice therewith. What I call common Scuppernong wine is made by mixing the juice, strained through folds of a woolen blanket, with about one-third brandy or pure spirits. This sells at a dollar a gallon, and is accounted by some as good as any, medicinally at least, and I have known it preferred to foreign champaigne, at 2½ dollars per bottle. So our noble native, according to the above statement, is capable of making wines of almost all grades of excellence, and selling at from one dollar up to six per gallon, according to quality of safe-keeping, enriching ingredients, and process of making; and I am bold to say that no grape in the world is superior to the genuine white Scuppernong for eating or the table; I mean where the climate is congenial to its growth and perfection, (I learn it never does well South of latitude 37½, and I reckon, from what Mr. Longworth says of it, in the West part of our country); and as an evidence of this, I state that almost all visiting my vineyards, and paying entrance fees, prefer the Scuppernong to all other grapes, though I have sometimes, or in seasons, some kinds not all rooting, as Isabella, Catawba, Longworth, Ohio, or Segar Box, &c., more than 100 choice varieties. The past season, for several weeks, daily, visiters, and at *pic nics*, 50 at a time, witnessed and participated in the superior excellence and sure bearing qualities particularly of the Scuppernong grape, especially in a year that almost all other fruit failed, through a late severe frost in the spring; and when grapes were ordered to be selected for carrying away, at 50 cents per gallon, the greater part of every selection was always the genuine white Scuppernong. I took with me, last October, to court, at the town of Warrenton (20 miles), several bushels of Scuppernong grapes only, and, selling them readily at 50 cents per gallon, sent for a like quantity, and sold them too, to satisfy the demand; but the demand was greater on account of the want of other fruit, and also of Scuppernong grapes on vines in the near vicinity of that town: and I account for the latter circumstance on the same principle for the failure of some of my own Scuppernorg vines, the past season, viz: that the ground underneath the vines had not been scarrified or ploughed the fall preceding, as had been the ground under my vines that bore well; I mean such vines as the ground underneath had not been covered with litter in some such way as said of that underneath my canopy where are the rock pillars. And I remark here, that the very best general method of keeping up the fertility and bearing qualities of a vineyard is to keep scarrifying underneath the canopies, the proper time in the fall, to prevent the falling leaves from blowing away, for these and other vegetable litter, incorporated with the surface, is the best manure for vineyards—on the principle of the woods and other vegetable growth, *best enriched* by their *own made litter*.

One excellence of the Scuppernong grape is the large size of its fruit, as well as the fragrance thereof. A plate full of this grape perfumes a whole room with a delightful fragrance; and, years since, in the "American Farmer," I challenged the world, under a certificate of reputable gentlemen, to produce a larger grape than a Scuppernong found in my vineyards, it being 4 inches in circumference—one found since of same dimensions—while it is not uncommon to find berries 3½ inches round; the common size is 3 inches.

I lately saw a calculation of vineyard cost, as to an acre, in the Patent Office Report of 1848, as well as in the "Commercial Review," which far outgoes one for the South, and especially of Scuppernong vines, as I will show by a brief statement: I say brief, for I see I have now exceeded my intended limits of this communication, written in a familiar conversational style, but, perhaps, not the worse for that:

Say 100 well rooted Scuppernong vines, after as small rooted layers (this kind not succeeding by cuttings), 2 years in the nursery, 25 cents each	25 00
25 stakes, to stand 2 years, each 2 cents . .	50
Setting out the vines, at 4 cents each . . .	1 00
	$26 50

The third year, they will, with proper attention, begin to bear, so as to cover some of the expenses; and longer than two years, the ground between the intervals of vines (standing 20 feet each way) may be cultivated, say with Irish potatoes, bush beans, or some vegetable not of high growth or shading. But the third year, the acre say of Scuppernong vineyard ought to be scaffolded, in order to properly spread the branches (unchecked in length), and to form the canopies gradually.

Say 20 rock pillars, 40 feet each way, at $4 each	80 00
And 50 posts (moderate size will do), at 5 cents each	2 50
Nailing shingles or cleats on each side of the upper ends of the posts, to hold the poles thereon, and setting the lower ends on flat rocks, say each 5 cents	2 50
About 40 larger poles, 40 feet long, at, say a dollar each, or 200 smaller poles, 20 feet, at 20 cents	40 00
And for 400 still smaller poles, to fill up intermediate spaces, each, say 5 cents . .	20 00
	$145 00

So about 150 dollars is the cost of an acre of Scuppernong vineyard, at the third year after planting; but if large posts be substituted for rock pillars, one item of cost is greatly lessened. If smaller posts every 10 feet, and split scantling or rails, 10 or 12 feet long, be used instead of longer posts and barked poles, the expense of scaffolding will be somewhat greater; and if vines other than Scuppernong, planted at my favorite distance for them, or 10 feet each way, then quadruple the number of rooted vines per acre, and stakes; and, at same price of vines and stakes, quadruple the expense of commencing the vineyard.

As to the profits of, say a Scuppernong vineyard, the foregoing statements as to uniform annual yield and excellency and prices of wines may be kept in view to make the calculation; or say, an acre, at 7 or 8 years old, a thousand gallons of wine yearly; and at 10 or 12 years old, 2,000 gallons is attainable; and say one-third off for making the wine, and the safe-keeping, enriching ingredients.

As to expense of manuring a Southern vineyard, I ought to have stated, in its proper place, that any ground rich enough for good cotton or corn, will do for a vineyard; and that if any manure be used, let it be of the vegetable kind; and to start with, the holes, 2 feet square say, dug to plant, may be filled with manure two-thirds full, and then good surface earth, till within a few inches of the level on which to plant. I have known very luxuriant growing vines never bear in consequence of ground being too rich with animal manure.

And I here remark, ere I close, that a very good plan, I find, to keep improving in wine making, as well as always to know the state of wines on hand, is to put a numbered label on each cask, to be transferred to another when racking, and, opposite a corresponding number, in a book of record, put down the time when made, the kind and quality of safe-keeping ingredients, and other particulars, under their proper heads. My casks or numbers, last year, were upwards of 60—some holding 70 gallons, and others so much less, on an average, as to make my product about 50 barrels. The season lately past, for reasons before stated, as to great call of visiters, and for grapes, and partial failure of some vines bearing, I fall short of half the quantity of wine. I consider my vineyards good for, annually, 50 barrels, and on the increase of 10 barrels a year.

I close by observing that, as doubts of the excellent qualities of the Scuppernong grape, as well as of its wonderful productiveness and quality, and prices of wines, suggested of late, from a most respectable vintner West, of high standing, I most respectfully refer, as to the merits of my statements, to most respectable men of this State, as Ex-Gov. William Graham, Gov. Charles Manly (both buying annually my wines), and to the Honorable Messrs. Mangum, Badger, Daniel and Ashe, now members of Congress. Most respectfully yours, &c.

SIDNEY WELLS.

IMPORTANT MOVEMENT IN GEORGIA.—Mr. Lecond, Senator from Muscogee and Harris, has offered the subjoined preamble and resolution which met with universal approbation in the Senate. It was adopted, and the name of Mr. L. added to the committee to which it refers:—

Whereas, taking into view the great prosperity of the State of Georgia, and the many improvements now being made, both in mechanical arts and manufactures; and whereas many of our intelligent mechanics and planters are without the means of making and trying experiments, without some hope of reward; and whereas many of the northern States, by their fostering care and the many indocements held out by high premiums, have brought to light many new inventions in the making of different utensils for agricultural purposes—also many important improvements in the management of cattle and sheep—also in the making and application of manures, and the tillage of the earth; and whereas, of all the great interests of the country, demanding the fostering care of the Legislature, the agricultural interest is the highest—laying, as it does, at the foundation of the prosperity of all—

Resolved, that the Joint Standing Committee on Internal Improvements be instructed to report, by bill under such rules and regulations as they may think proper to direct.

Farming at Mount Airy College.

MOUNT AIRY, January 17, 1850.

To the Editor of the American Farmer.

Having completed our work of harvesting and preparing our crops for market, I have decided to give you a statement of the amount of each, which you are privileged to publish, if you think it will be worth the space it will occupy.

We have about 70 acres of land in the Institute farm, about 5 acres of which are occupied by buildings, ornamental grounds, nurseries, &c., leaving 65 acres of farming land. We have had a favorable season for our crops generally, though the rye crop was diminished, by the rust, about 23 per cent., and the potatoes at least 50 per cent., by the bug (see art. on the curculio, annexed) in the tops, which were killed before the crop was half matured.

I noticed, when we were harvesting, that there was occasionally a hill the tops of which were still green; and, on examination, I found these were all of a variety produced on the place, which we call "purple seedlings," which were accidentally mixed with the Mercers (our principal crop), and found that they yielded at least ¼ more than the Mercers, and did not appear to be affected by the curculio, and were large and fine, and perfectly sound. But, on examining the tops, I found that the insects were as abundant in these as in the Mercers, but, owing to their being so much larger than those of the Mercers, there was abundant room and nutriment, in the centre of the plant, for the insect, without destroying or interfering with the circulatory portions of it.

I at once decided to preserve them all for seed, and have on hand about 100 bushels of them, half of which I would sell.

Our farm products for 1849 are as follows:

	Variety.	Acres.	Bushels.	Value.		Variety.	Acres.	Bushels.	Value.	STOCK KEPT. Variety.	No.	Amount sold
ROOT CROPS.	Carrots . .	3⅓	2672	45 cts.	CEREALS.	Maize . . .	7¼	300	60 cts	Cows . . .	†14	———
	Potatoes. .	7	1100	70 "		Oats	3	150	35 "	Y'ng Cattle	7	———
	Turnips . .	5½	2296	13 "		Rye	9¼	200	65 "	Oxen . . .	2	———
	Ruta Baga	1¼	900	38 "		Wheat . . .	5¼	220	150*"	Horses . .	3	———
	Sugar Beets					Buckwheat .	½	25	60 "	Swine . .	40	———
	Parsnips. .									Calves sold	11	$66 00
										Pigs sold .	30	314 00‡
		Total	6968				Total	895		Total		$380 00

We have on hand an abundance of hay and other fodder for our stock. The manure which we use for the different crops is as follows: For maize, long yard, ploughed in, with domestic manufactured poudrette, in the hill, and gypsum after it is up.

For potatoes, we use long yard manure, spread on the surface, just immediately before planting, which is raked into every other furrow, in which the seed is placed under the manure, and on the furrow side of the furrow, or under the edge of the furrow slice, and before they are ploughed in; the manure over the potatoes is strewed with the pine coal and ashes obtained from the locomotive, burning pine wood.

In case of an insufficiency of yard manure, we use guano, about 300 lbs. per acre, which we prepare thus: Screen the guano, to separate the lumps, which are pulverized on the barn floor, by means of the flail; then mix with fine coal and ashes, and gypsum, 2 parts guano, one of gypsum, and seven of coal; strew it on the seed in the furrow.

We experimented in planting one portion of our potatoes by strewing the seed in the furrow, with very light wheaten bran, about 100 bushels per acre; and the product was fully equal to any other portion of the field.

We use potatoes, for seed, of medium size, cutting so as to insure 2 eyes to each piece, and place them 8 inches apart, in every other furrow, which we plough about 5 inches in depth, and 10 in width.

When we have completed the planting, we roll thoroughly. About ten days after the planting, we cultivate the whole surface with the cultivator, and continue to use the harrow in the dry part of the day, nearly every day until about half of them are up. If managed thus, they need but little more cultivation; the passage of the cultivator through them once will be sufficient.

We raise them by ploughing the same way that we ploughed when planting, except that we turn the back into the dead furrows, running the cultivator, drawn by one horse, in the furrow from which the potatoes have been picked, which will uncover what the plough has not. After this process, the ground is harrowed, cross ploughed, and the potatoes again picked, when it is sown with 300 lbs. of guano (prepared as above described), the wheat sown, and both cultivated in together.

I use no other manure for wheat, except that we sow from 3 to 5 bushels of bone dust per acre.

My soil is a mica, sandy loam, and has had plenty of lime applied by my predecessor.

I generally seed with wheat, with 16 quarts of red clover per acre, sown in the spring, and rolled in after sowing the clover; but last year, my wheat yielded 36 6-32 bushels per acre, and I ploughed under the stubble, and sowed 1 lb. of turnip seed, 300 lbs. of guano, prepared as above, and 12 quarts of timothy seed per acre, and produced 420 bushels, per acre, of turnips. The timothy has taken well, and the wheat which shed has come up very scantily, and I now expect to harvest at least 25 bushels per acre of wheat next summer, and probably a fair crop of timothy seed.

My fussiform and conical shaped roots I usually manure with compost, consisting of the scrapings of the cattle yards, street dirt, bone dust, gypsum and guano, ploughed in. My best carrots, this year, yielded 888⅓ bushels (50 lbs. per bushel) per acre; and the poorest, which had no application except 400 lbs. of guano, ploughed in, yielded 673 bushels per acre. Their cost of production was a fraction less than 11 cents per bushel.

* Sold for seed, all Mediterranean.
† Butter and milk all consumed.
‡ Pigs not fattened, but all sold for breed.

We have but 12 acres in pasture land; and the secret of our maintaining so large a stock, besides producing the above crops, is, that we soil all the cattle in the early part of summer with rye, oats, maize, planted thickly in drills, lucerne, &c.—all fed in stables, well littered with straw, butts of maize stalks, and leaves, thus making an astonishing amount of manure. We cut the maize up by the ground before the frost injures the fodder, putting about 100 spires in a stack. When husked, we chop off about ¼ of the butts of the stalks, and continue to strew them (the butts) in the yard every day in winter, when the ground is frozen; the balance we chop with a horse power cutting box (which will cut 3 bushels per minute, with one horse), and steam them, with turnips, which will impart no unpleasant flavor to the milk or butter, if the steam is allowed to escape slightly from the box until they begin to be soft.

My cows that are fed about 4 bushels per diem of this mixture, stalks and turnips, equal parts, steamed, are in good condition, and yield a fair quantity and quality of milk and butter. I prepare the poudrette by taking both the solid and liquid matter from the privies, and mingling it with 4 or 5 times its bulk of rich mould, coal ashes, charcoal, equal parts, and about half its bulk of gypsum. I had, last spring, 18 one horse cart loads of night soil, which I prepared as above, and applied it on my corn. On one portion of the lot, I applied about 400 lbs. of the guano compost per acre, which I dropped in the furrow, and covered with earth; then dropped the corn directly over it; and that portion endured the drought much better, and yielded 20 per cent more than that on which I applied the poudrette. But I fear that I have already far transcended the bounds of propriety in thus protracting this desultory dissertation to this length; hence, I will abruptly close, by thanking you heartily for the immense amount of interesting and valuable matter which you have so ably compiled and laid before us in your journal, which, in the list of 14 which I take, stands unrivalled.

Truly yours, JOHN WILKINSON.

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TENTH FAMILY—*Cetonidae*.—By M. H. Morris. —The curculio trinotatus, of Melsheimer—Baridius trinotatus, Schönher, deposits its egg on the leaf buds of the potatoe vine, from eight to eighteen inches above the ground. The eggs, when first deposited, are bright red, but soon change to a pale yellow; they are deposited singly upon the bud, at the foot stalk of the leaf, and never more than three on a stem. The young grub, which is of a pale yellow color, soon penetrates the bud and enters the stem of the plant, where, with its head downwards, it feeds on the interior of the stem, and proceeds towards the root, where it frequently undergoes its change. When there are three in one stem, the whole interior of the stem, from the spot where the worms entered to the end of the root, will be found hollow; here the insects undergo their entire change, and may be found in various states of progress, according to the season in which they are searched for—the perfect insect seldom leaving the stem until the plant is dead, from which I infer that the potatoe plant is the food of the perfect insect, as well as of the grub. The potatoe plants seldom show signs of injury until the grubs have arrived at maturity, unless the weather be hot and dry; then they soon wither, and the plants look as if they had been scalded.

WORK IN THE GARDEN.

If it is your wish to have a good garden, you must begin at once—go to work with spirit, and pause not until all your preliminary labors are completed. To begin at the beginning, you must commence with

Sowing Seeds.—If you have no hot beds—which you ought to have—select a warm border in your garden, facing the south, cover it with 2 or 3 inches in depth of good stable manure, dig it in and rake, then spread thereon about 1 inch in depth of a mixture composed of 7 parts well rotted manure and 1 part ashes, rake that in. Divide this border thus prepared into compartments, and sow portions of several kinds of early *Cabbage, Cauliflower, Brocoli, Tomatoes, Egg-plant, and Lettuce seeds*, raking each kind lightly in and pressing down the soil with the back of a spade, so as to bring the earth into close contact with the seed, and thus bring on an early germination.

When the plants come up, it will be well to water them occasionally with horse dung tea, made by putting half a bushel of dung into a barrel and filling it up with water; the barrel to be placed in the sun. Or you may substitute for this, a decoction of 1 lb. of Guano to 10 gallons of water.

If the plants should become infected with lice or other insects, or assume a sickly hue, prepare a mixture thus: place 4 oz. of *sulphur* and 1 gallon of soot in a bag, put the bag in a tub and pour thereon 5 gallons of *boiling* water: when cool, water the plants with the decoction. This will bear being filled up three or four times, and if judiciously applied will not only rid the plants of the vermin but restore them to healthful action, and cause them to grow with vigor. The best time to water plants at this season of the year is about noon.

Early Peas.—You cannot well plant peas too early, therefore, so soon as the frost is out of the ground prepare a bed and plant a few rows. At the expiration of every two weeks, until the last of April, plant a few rows more and you may insure to your family a continuous supply throughout the season. If you wish to plant for market, the sooner you get them in the better will it be so far as *price* is concerned. By planting the early and late varieties at the same time the continuity of supply may be reached.

Early Turnips.—The moment the frost is out of the ground is the time to sow the seed. A compost made of equal parts of well rotted manure, woods mould, and the scrapings of the yard or road is about the best for turnips. After thoroughly mixing these together add to the mass a few bushels of ashes, lime and bone-dust, mix the whole together, leave it in pic a few days, then dress your turnip ground with say 2 inches of the compost in depth, dig that in, then apply as much more to the surface and rake it in, then sow your turnip seed, rake it in and roll. When the plants come up dust with a mixture of equal parts of ashes and plaster, two or three days in succession. When big enough to thin, thin out the plants so as to let them stand 6, 8 or 10 inches asunder, and you may expect a good crop. The *Early Dutch* turnip is the best to sow at this season.

Brussels Sprouts.—Prepare a bed as for turnips, and sow in the same way.

Early potatoes.—You cannot get these in too soon; the moment the frost is out of the ground prepare your bed and plant.

Salsify or Vegetable Oyster.—Prepare a bed by manuring, digging and raking and drill in a few rows of this excellent root for family use and market—the same manure that suits other roots will suit this.

Asparagus beds.—Treat these to a good dressing of well rotted manure, fork it carefully in, then rake; this done sow salt over the bed so as to freely whiten the earth. Now if it so happens that you have no asparagus beds, add one to the other appointments of your garden; for besides being a saleable and profitable vegetable to grow for market, it is one of the most healthful luxuries that ever graced the compartment of a garden.

Seed onions.—Set these out.

Rhubarb.—If you have none of this growing in your garden, procure one or two dozen plants, set them out in a richly manured border, keep them clean, and they will supply your family with the material for making *tarts* throughout many years after the present—and when these tarts are well made, will be as good as those made from gooseberries or cranberries.

Onions.—Sow onion seed *early* this month, the earlier the better; by August the bulbs will be as large as those grown from sets, if the bed is kept clean.

Early peppers.—For an early supply, sow some seed in a flower pot, place that in your window.

Radishes.—Prepare a good mellow soil bed and sow radish seed.

Seed turnips.—Set these out.

Strawberry beds.—These must be cleaned off, manured, and the alleys between the rows covered with straw. If you desire large fruit, treat the vines to several waterings with horse dung tea, as we have advised in the case of early plants—or you may use a decoction of Guano—1 lb. Guano to 10 gallons water, to be filled up two or three times. These waterings are particularly serviceable when the vines are in bloom. Care however, is necessary to keep the nozzle of the watering pot well down, so as not to touch the flowers of the plants, and thus avoid washing away the farina of the flowers.

Gooseberries, Currants, Raspberries—Manure these, keep them clean, and you may expect fine fruit. New plantations of each should be made early this month.

Celery.—Prepare a bed on a warm border, by heavy manuring and thorough raking and sow some seed for early use.

Roses and flowering shrubs of all kinds should be put out early this month.

Grapes.—Prepare a compost comprised of 6 parts well rotted manure, 1 part ashes and 1 part bone earth, spread it widely around your grape vines, dig it in so as not to touch the roots, rake the ground, and the product of your vines will be greatly increased.

Sage, Hyssop, Thyme, Parsley, and all other pot and medicinal herbs, may be either sown or set out now, the sooner the better. Every garden should besides the above, have in it, every description of herb either used for curative or culinary purposes, as Chives, Shallots, Leeks, Garlic, Sweet Basil, Caraway, Coriander, Chammomile, Sweet Fennel, Lavender, Sweet Marjoram, Pot Marjoram, Mint, Hoarhound, Rosemary, summer and winter Savory, Catnip, Rue, Tansey and Wormwood.

Horse radish.—Plant out a bed of this excellent root—it is excellent to eat with the meats of the table, and excellent to make a syrup of with loaf sugar for colds and coughs.

Beets, Carrots, Parsnips.—Prepare a bed of deep friable mould and drill in a few rows of these roots for early use for your family, or if you desire them for sale, extend the limits of your beds. When grown early they all bring good prices in the market.

Spinach.—As early as you can get a bed ready sow spinach seed for early use.

Fig trees.—These may be either pruned or set out this month, the sooner done the better. A little manure, well rotted dung and ashes conduce to the vigorous growth of this fruit.

Beans may be planted any time after the middle of this month—the Mazagan, Lisbon and Windsor are best adapted to early culture.

Fruit Trees.—If you have any fruit trees in your garden, look to them, if there are any dead limbs on them, cut them off carefully, smooth the face of the wound, and apply the composition recommended under the head of "Orchards" in the work on the farm, dig in 2 or 3 inches deep as far as you think the roots extend a slight dressing of such manure as we recomended for orchards last month. If you have plums or apricots in your garden selection, treat the bodies of the trees to the painting we recommend for orchards, and sow one or two quarts of salt around and under each tree, as far as the limbs extend.

Thus concluding our memoranda for the month, we tender to the fair ones, whose province it is to preside over their respective gardens, our sincere wish that they may so incline the minds of their husbands, as that they will take ambition in making their gardens good and beautiful to look upon.

For the American Farmer.

THE PRESERVATION OF ROOTS AND TUBERS.

I have found it more difficult to preserve large quantities of roots through the winter, than I have to grow them, and have tried various means of keeping them, the most successful, I have decided to give you for publication.

Potatoes may be placed in almost any frost proof cellar, and in almost any quantity, provided they lie upon an open floor, with plenty of ventilation, for which, side windows on all sides are preferable. The windows should be so placed that the tops are on a level with the ceiling formed by the first floor of the building, and if possible above the level of the ground around the building; as this will ensure thorough circulation, and will effectually prevent an excess of condensed moisture generated by fermentation in the upper strata of the roots in the bins, from which cause they more frequently decay than any other. If the cellar is thus arranged the potatoes may lie 8 feet in depth, in bins, and take no harm.

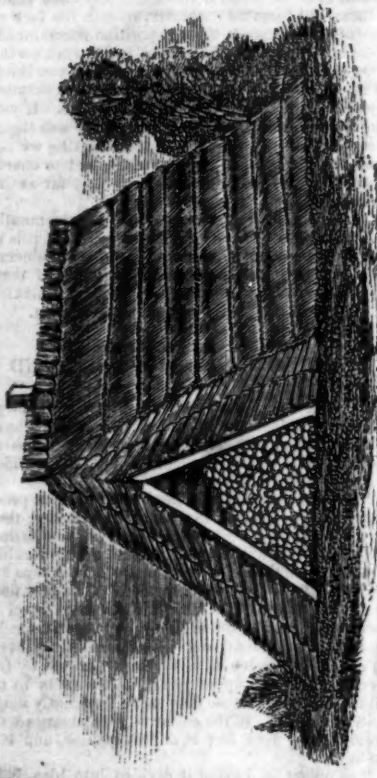
The object in having it divided into bins, is for convenience in filling, and withdrawing, and to prevent their being too much exposed to the air.

I make bins by setting joists slightly oblique, resting the upper end against the floor timbers over head, and lay in the boards loosely or without nailing on the upper side of the studs or oblique joists. When the contents of one bin has been withdrawn, the boards and joists may be removed, by which access to the next bin will be much more convenient, and that portion left in the cellar will always be kept in a snug compact condition.

The windows of the cellar should be open every mild day.

Beets, Carrots, Parsnips and Ruta Bagas may be kept in cellars, but they will require an immense amount of room, as they will not keep if they lie more than 3 or 4 feet in depth in the bins, and even at that depth they will grow very much, unless they are changed in the bins, and assorted about once in 4 or 5 weeks; where there is plenty of cellar room there is no better method of keeping those roots which are designed for feeding or marketing during the winter, than in cellars, but those intended for spring use, all except the parsnip, which will keep best in the ground, may be better kept in beds under stalks or straw stacks, with proper ventilation.

The plan that I have practiced with the best success is the following.



ROOT HOUSE AND STALK STACK—Sectional and Perspective View.

1 place 2 rows of posts (such as are usually used for fence posts,) about 7½ feet long, though 9 feet long would be better, so far apart at the bottom as to form an equilateral triangle when the tops are brought together.

These are placed in rows about the length of a rail apart, the bottoms let into the ground, say, 6 inches, or sufficiently to steady them without staylathing. Five pair posts will require 4 lengths of rails on each side to form a covering; these will only require to be laid on loosely, and no faster than the space inside is filled with roots, which will make it very convenient to fill, as the bottom, to the height of 2 feet or more may be filled by dumping the roots from the carts, after which it should be filled by scooping them from the carts, leaving a space of one foot at the top, the entire length of the house for circulation and escape of rarified air and moisture. The house should be built with the gables North and South.

The ends should be closed by setting a post of the same length, as the side ones, against the end obliquely, and filling the spaces between it and the corner side posts with short pieces of wood, or rails.

The house should be filled by beginning at one end and covering the part filled, temporarily with sheaves of straw or stalks until the weather became cold, when it should be permanently covered for winter by building a large stack of corn stalks or straw over the whole; I use stalks. Whilst the stack is in the process of building, a ventillation, made of 4 common boards so nailed together as to form a square tube, long enough to protrude from the top of the stack should be set on the top of the rails over the middle of the house, which will provide an effectual ventillation.

My Turnips thus housed this year are better preserved than any other that I ever saw; those taken from the house in the latter part of January had not withered in the least, or thrown out a sprout, which was owing to the low temperature at which they had been kept.

When those which were put in the cellars for use in the early part of the winter are consumed, and those from the turnip house are needed, advantage must be taken of a fine day, and a portion of the stalks or straw removed from one end of the house, and as many as are needed should be drawn into the cellars, the rails and posts from the portion of the house vacated should be removed and the end closed again with stalks or straw. This I consider the best mode of preserving roots with which I am familiar, The accompanying drawing will serve to illustrate a sectional view of the root house and stalk covering.

JNO. WILKINSON.

Mount Airy Agricultural Institute, Germantown, Pa. Jan. 1850.

PERUVIAN GUANO.—The price of this article has advanced within the past month; several circumstances have combined to produce this result. This has been the principal market for the sale of it, and there was none left in first hands last fall; but a large quantity was known to be stored in New York, and it was supposed that this could and would be brought to this port, for the spring supply, in case no direct importation was made—a demand however, has arisen for it, in New York, and the dealers here are unable to obtain it, except at a price which has heretofore been paid for it in this market, and freight and other charges added to it. There was an expectation that the California vessels would return loaded with it, but it appears that although hundreds were going out, there are few on the return, the difficulty of obtaining crews detaining them. There has been a large cargo of Patagonian received, but we are apprehensive that the supply of all kinds will be insufficient for the demand this spring. Farmers will have to use less by mixing it with their composts. Prices in our market, will be found in our price current.

THE AMERICAN FARMER.

BALTIMORE, MARCH 1, 1850.

PRIZE ESSAY ON FARM BUILDINGS.—After the last part of our paper was put to press, we received a note from the committee, informing us that the prize for the best Essay on Farm Buildings had been awarded to "*A Friend to Improvement.*" As the MSS. have not been returned to us yet, we are unable to announce the name of the author. The essay will certainly appear next month.

CORN.—We have received from J. G. Cox, Esq, several ears each, of the Prairie, Squaw and Chicken or Pop Corn, brought with him from a late trip to the West.

In Mr. Duckett's letter in our last, relative to his corn, about midway, it should have read "boned this last spring with 20 bushels," instead of *thirty*; in the 21 line read "stocks" instead of stalks, and in the last word, 5th line, for *was* read *were*.

FINE MUTTON.—We had recently the opportunity of seeing some fine Muttons raised by Mr. Wm. Jessup, of Baltimore Co. and slaughtered by Mr. Turner for our market, and also some raised by Mr. Henry Carroll and purchased by Messrs Sterling Thomas and Sons. They were of the cross of the New Oxfordshire and the Bakewell and Southdown, and were pronounced by the butchers, the finest lot ever brought to this market from Baltimore Co., and, for their age, seldom surpassed from any quarter. These gentlemen deserve much credit for their liberal efforts to improve the breed of sheep in their county; they realised $10 a head for them, at 18 months old.

VIRGINIA MUTTON IN NEW YORK.—The New York Tribune has the following;

Notice to Epicures.—Wm. Lalor, of 30 and 31 Centre market, has sixty Sheep of the Cotswold breed, raised by Col. Josiah W. Ware of Berryville, Clarke county, Va.—These sheep are said to be superior to any that have ever been in this market. He would be pleased to have hotel keepers and others and examine them this day, when they will be offered for sale.

DORCHESTER AND SOMERSET COUNTIES.—A correspondent in Talbot county, who is one of the best farmers in the State, thus speaks of the lands of these counties:

The communication from Mr. Wallace in your last number, is profitable to the Maryland farmer, and if old Dorset could get a start, agriculture might get on in fine style. A little bold effort in that county would soon put her in the scale of advancement, which her worthy tillers should be proud to hold her up for. Finer land for improvement can scarcely be found in the U. States than is South-east of me, so far as I can judge. I prefer the cold white oak soil, for it holds better the manure you put on it than any other land; yet the soil of which Dorset is composed is far, very far, from being unprofitable agricultural land,—proper draining, thorough and complete tilth, with lime and manure, if applied, will soon cause her to hold up a high head, and take a prominent stand in agriculture, which she never can do unless there be more Wallaces to spring the rattle and cry lime, drainage, manure, proper tilth, and old Dorset is redeemed.

I passed through Somerset county in November last, and found fine Corn. They have land generally good for corn, and some as fine as I ever saw, if they would only note from those experienced how to cultivate. A sub-soil plow would do much for them, and with more neatness in preparing and laying down the land. The natural Clover is as fine as I ever saw, and *I would* agree to make as much corn and wheat on some land I saw there as can be made on the shore, if you would give me lime and a sub-soil plow, with the additional use of under drains. The hard pan must be operated on in some way before they can effect much on their best lands; *I* would plow 2 to 4 inches, sub-soil 12 to 15, under-drain 2½ to 3½ feet, sink wells through to the sand in all the cups, and then make number one crops.

M. G.

THE FLOWER GARDEN—MARCH.

Prepared by John Feast, Florist, 279 Lexington st. for the American Farmer.

This month, much is to be done in attending to out-door employment, in preparing the borders, and pruning all shrubs, trees and creepers, tieing them up neatly to stakes, trellisses, or nailing to walls; prune out all decayed wood, and cut such portions out as will make the plants have a neat and handsome appearance; in general, there is not enough of this done, as, from experience, the nearer all plants are cut in, the more vigorous and strong they grow, besides keeping in fine health, with superior bloom, and a means of possessing the plants many more years.

Bulbous Roots, in the borders, will now make their appearance. If there is any covering on them, have it removed, and cleanse all decayed leaves, so as not to obstruct the flower stalk; and, if necessary, give a top dressing of fine rich compost between the rows; this will add to their flowers in size, besides a much finer and abundant bloom.

All hardy Shrubbery and Ornamental Trees should be planted out this month; also, roses, herbaceous plants and creepers; but if they have been protected during the winter, next month will be soon enough, as they are generally more forward, and more liable to be injured by the severe weather so often experienced during this month, killing the plants or rendering them useless altogether.

Frames for sowing seeds should be put in operation; and such plants as are wanted to plant out, the seed may be now sown, as China Asters, stock Gilliflowers, Verbenas, Pansies, Nemaphillas, Candy Tuft, Phlox Drummondii, Browalia, Ameranthus, Tricolor, Ice plant, Sensitive plant, and many others, with the hardy perennial plants; they should be planted out in separate borders, as but few will flower before next season; standing the winter makes them desirable in all collections, and there is nothing more beautiful than the different kinds of Phloxes, Lychius, Penstemons, Chelones, Aconitum, Delphiniums, double Primroses, Polyanthus, Auriculas, and the different Lillies, as Lillium Speciosa, and many others of this beautiful family of plants, flowering through the summer months.

Dahlias, for early flowering, may be brought forward, and the young sprouts taken off, potted in small pots, and plunged in a gentle heat, to forward their growth; and such as can be divided at the roots, may be increased in this way, keeping some dry for late planting. Seeds may be sown, if new varieties are wanted.

Camellias will begin to grow; and the main blooms over, they will require more water when growing, and frequent syringing over the tops, and repot such as want it; inarching may be done now, and cuttings taken off, if the shoots are not too far advanced. Seeds should be sown, if not done previously.

Azaleas will be in bloom, and should be liberally supplied with water, as no plant suffers more, through this neglect, when in flower, than the Azalea; this should be strictly adhered to.

Heaths, Fuchias, Diasmas, Torenias, Salvias, and most greenhouse plants may be repotted for the spring, and cuttings of such as are wanted can be taken off for increase; also, prune such as are irregular in their growth, and have tied to neat stakes such as require supports. Hydranges cut down and repot, also cuttings may be put in with success.

Gloximias and Achemenes repot in suitable sized pots, and put in a rtch light compost of leaf mould, a little loam and peat, and do not give too much water until the roots begin to grow, as it is apt to rot them and cause decay.

Geraniums may be repotted in their proper size for flowering; keep the plants hardy, and near the glass, take care to keep the plants neat and clean, if necessary, fumigate, to destroy the insects that may infest them.

Roses will begin to bloom, and such as require any cutting or potting should be done now; also cuttings can be taken for increase, and grafting on the root may be performed yet with budding, which is a speedy way to increase new varieties. Seedlings repot, and sow seed, if not already done. Auriculas should be attended to, and divide the roots; repot in good rich loam, with plenty of drainage, and keep in a close frame for a few days, and give liberal supplies of water, no tribe of plants are more beautiful, if care is taken with them.

METEOROLOGICAL TABLE,

From the 21st of January to the 20th of February.

Kept at Schellman Hall, near Sykesville, Carroll County, Md.

Taken at 6 o'clock, a. m., 2 o'clock, noon, and at 6 o'clock.

	Wind.			Temperature			Remarks.
21	E	NE	W	32	38	35	Sleet, rain 2 3-8 in., fog
22	NW	NW	W	35	41	36	Clear
23	W	W	W	36	45	40	Clear
24	E	SE	E	32	40	39	Cloudy, rain 6-8 in.
25	S	SW	W	40	55	53	Cloudy, rain night 2-8 in.
26	SW	E	S	44	54	50	Cloudy
27	SW	W	W	48	60	50	Clear
28	NE	E	W	39	40	39	Cloudy, snow, clear
29	NW	NW	NW	30	40	39	Clear
30	N	N	NE	26	38	35	Clear
31	NE	S	S	34	38	37	Frost, clear
1	W	SW	S	30	55	48	Clear
2	NW	S	S	40	60	55	Clear, storm of wind, rain 2-4 in
3	SW	NW	NW	40	30	28	Clear
4	NW	NW	NW	15	21	15	Clear
5	NW	NW	NW	7	21	15	Clear
6	NE	SE	SE	9	23	23	Clear, cloudy
7	SE	W	SW	23	35	32	Clear
8	W	S	W	31	43	43	Cloudy, clear
9	SW	SE	SW	39	53	52	Rain 1 in.
10	W	SW	SW	54	40	30	Clear cloudy,
11	NW	NW	NW	30	35	30	Clear
12	NW	NW	W	28	40	32	Clear
13	W	E	SE	30	39	35	Clear
14	SE	S	S	32	45	38	Rain and sleet 1 1-2 in., clear
15	SW	W	NW	32	35	29	Clear, cloudy
16	NW	W	W	21	35	25	Clear
17	W	SW	SW	19	45	43	Clear
18	SW	SW	SW	35	48	40	Clear, snow 1-10 in.
19	NW	W	W	30	36	26	Clear
20	W	SW	SW	23	45	44	Clear

REVIEW OF THE TOBACCO & GRAIN MARKETS.

Reported for the American Farmer by J. W. & E. Reynolds.

The operations in the Tobacco market for the past month have been very limited. The stock in present hands is smaller than it has been at this period for many years. The few hogsheads of the new crop that have reached market, being of good quality, have been readily taken at prices ranging from $6 a $9. The receipts for March we anticipate will be large, and we fear that in the eagerness of planters to get their crops in market, a proper attention to the condition in some cases may be neglected, and in consequence they will have much of their Tobacco stayed—to guard against which they cannot be too particular, especially at this season, when the injury sustained from being stayed is much greater than at any other season of the year. While we would advise planters to get their crops in market at their earliest convenience, we would advise them at the same time to be fully confident before packing, that their tobacco is in such good condition that it will pass inspection. We quote common dark crop at from $3 a 3¾, common to good seconds at $4 a 6, good crop $4½ a 6, fine $7 a 10, as per quality, ground leaf $4 a 9.

White corn 48 a 51c, yellow 50 a 52c.

Red Wheat $1.05 a 1.10, white $1.12 a 1.20.

The news by the America, the last steamer, has had a tendency to depress both Cotton and Flour, and a slight decline has taken place in each. Howd. St. Flour, $4.62 a 4.68. Whiskey, 25½c. In bbls. dull. Beef Cattle, 670 head offered on Monday, of which 550 were sold to city butchers; balance left over, the stock very fair, and prices ranged from $2.60 to 3. 75 on the hoof, equal to $5.50 a 7.25 net, averaging $3.25 gross. Hogs, selling at $5½. Coffee, Rio, 14c. Mackerel, No. 1, $12½ a 13; No. 2, $8½; No. 3, $6½ a 6¾. Molasses, N. O., 27 a 28c. Plaster, $2.75 per ton; ground, $1.12 per barrel. Rice, 3½ a 3¾c. per lb. Sugar, N. O., new crop, $4.30 a 4.80; P. Rico, new crop, $5.05 a 6.10; on Thursday at auction 478 hhds new Crop New Orleans were sold at $4.60 a 5.90. [The Sugars which brought $5.90 are prepared by a new patent process, and are very superior.] Of Tobacco, the total inspections this year, so far, are 631 hhds against 1129 hhds to the same period last year. At Bremen, between the 1st and 21st of January last, there were sold 3500 hhds of Maryland and Ohio Tobacco, principally of the former against an average of 1200 hhds for the same period of the two preceding years.

Clover seed is selling (by retail), $4.75 to 5.25, according to quality. Timothy, $3.25 to 3.75, as to quality. Orchard is scarce, $1.75. Herds' Grass, $1.

Guano, Peruvian, $45 per 2000 lbs.
Do Patago'n, 35 per 2000 lbs.
Do 2d qual. do. $30 a 34 do.
Do Chilian, 29 per 2000 lbs.
} small stock.

BONE DUST.

THE subscriber is prepared to furnish from 1 to 1000 bushels Ground Bones, at his establishment, at Canton, opposite Brines' Distillery, below the race course, or orders can be left at his residence, corner of Happy Alley and Eastern Avenue. A sample is left at the Agricultural Society's hall, where it will be shown by the editor of the American Farmer, with whom orders can be left. Col. W. W. W. Bowie, of Prince George's, who has used it, writes as follows; "I was highly pleased with your bone dust; that at 50 cts. per bushel was the best I ever saw; that at 35 cts. was very fair for the price.

JOSHUA HORNER.

mar-1t*

CORN PLANTERS,

WARRANTED the best article in use. Price, $20. For sale by E. WHITMAN,

f1 Cor. of Light and Pratt streets, Baltimore.

To Planters, Farmers, Mill Owners and others.

MURRAY & CLARK,

MILLWRIGHTS AND MACHINISTS,

RESPECTFULLY inform the public that they are now established in BALTIMORE, MD., AND ELIZABETH CITY, N. C., and are prepared to furnish all kinds of MILL-WORK, HOISTING MACHINES, CRANES and AGRICULTURAL MACHINERY, at the shortest notice, and as cheap as can be got elsewhere, such as Mill Patterns, Mill Castings, Wrought Iron Work, Brass Castings and Agricultural Machinery, such as Horse Powers, for all purposes, Thrashing Machines, Portable Grist Mills for hand or power, Grain Fans; Straw, Hay and Fodder Cutters, for hand or power, Corn Crushers, for hand or power, Grind Stones, Picks, Mattocks, Grubbing Hoes, Axes, Wrought Plows, and Plow Castings, also the far-famed PETTIGREW CORN SHELLER, improved by Murray, that will shell from 300 to 700 barrels of Corn per day, and would refer to the following gentlemen, who have them in use.

Perquimans Co, N. C.—Edmond B. Skinner, Benj S. Skinner, Francis Nixon, Col. James Lee, A. C. Toms, H. N. Mahane, Thomas Newby, Dr. C. M. Ford, James M. Sumner, Esqrs.

Halifax, N. C.—Thomas P. Devereux, David Clark, Esqrs.

Pasquotank Co, N. C.—William Glover, William H. Davis, Joseph H. Pool, John C. Barnes, George N. Pool, Robert Pendleton, Thomas F. Banks, William Charles, Edmond Perkins, James E. Weeks, Mark S. Sawyer, Thad. F. Banks, James L. Mullen, Esqrs.

Chowan Co, N. C.—James C. Johnston, Thomas D. Warren, Aug. Moore, Joshua Skinner, Esqrs.

Bertie Co, N. C.—John Devereux, Esq.

Camden Co, N. C.—W. N. Gregory, Major Gregory, Wm. I. Abbott, Dr. F. N. Mullen, Esqrs.

We here take pleasure in giving the following Extract of a letter received on the 29th of September, 1849, from Thomas D. Warren, Esq., Endenton, Chowan Co., N. C.

DEAR SIR:—Your letter asking my opinion as to the performance of the *Horse Powers and Thrashers*—furnished me by you, was duly received; in answer, I am happy to say that they are very excellent Machines, and deserve all the praise that I can bestow upon them. The principle of the powers is good, and combines great velocity with easy draft—is simple and easily adjusted, which is a great disideratum to a farmer. I am highly pleased with their performance, and give them preference to any I have ever used or seen. As to Fans—I have one from Baltimore, one from New York, and several others, but none are equal to the one sent me by your partner, Mr. Clark. I shall order more from him of the same sort.

With respect, &c., I am yours,

THOS. D. WARREN.

MURRAY & CLARK:—The Fan spoken of above, is one o the same pattern that Mr. Hathaway wrote to us of, as having cleaned one thousand bushels of Wheat within one day.

The following is handed to us by Mr. A. W. Willett, who is now operating with two of our Powers and Thrashers.

DEAR SIR:—In answer to your inquiry about Machines, we would respectfully say to all those that are in want of Machines, that yours is the best we have seen—as it does not break the grain—leaves the straw in good condition—works easy, and thrashes as clean and as fast as any we have seen—and for durability, there is none better made.

Respectfully yours,

G. MYERS, JR.

JOHN CONNELLY, Manager for Capt. McBlair, HIRAM RAUFMAN, MOORE and HOOVER.

MR. A. W. WILLETT: *Baltimore, 2d Oct.*, 1849.

SIR:—In reply to yours of 25th inst., I have much pleasure in stating that the thrashing done for me was highly satisfactory; the performance of your Machine appeared to be perfect.—Should I have more thrashing to do, and you were able to attend to it, I should employ you to do it.

Yours respectfully, H. GELSTON.

Baltimore County, Md., Oct. 2d., 1849.

Having witnessed the operation of Mr. A. W. Willett's Threshing Machine, I take pleasure in recommending it to any who may wish to employ or purchase such a Machine. This Machine made by Messrs. Murray & Clark, was employed by me for something less than two days and a half in getting out a crop of oats. In my judgment it performed its work thoroughly, and with sufficient rapidity—almost without friction, and what is unusual, without very little noise. The arrangement of the teeth is such as to prevent their flying out and endangering the men when any of them are broken by the accidental introducion of small stones or other hard substances.

SAML. McCULLOH, JR., M. D.

About the *Hand Corn Shellers* which received the Premium at the late Fair of the Agricultural Society, that will shell and seperate 50 barrels of corn per day, we would refer to the following gentlemen who have them in use. Joseph H. Pool, William Crawford, Joshua Stewart. William Temple, Esqs., of Pasquotank County, N. C. and Nathan Halstead, Esq. of Camden County, N. C. A great number of these Shellers have been sent to Savannah and other places.

About *Portable Mills*, which we Manufacture for the different purposes of Grinding Wheat, Corn, Rye, Oats, Sugar, Coffee, Salt, Salt Petre, Red Lead, Chrome Ore, Magnesia, Alum Clay, Tartaric Acid, Cream Tartar, all kinds of Spices, Paints, Plaster, Coal and other purposes. The following gentlemen have them in use in the City of Baltimore. Mr. P. S. Cappell, Mr. William Davison, Baltimore Eagle Works, E. Stabler & Co., Messrs. Richstine, Mr. Vanness, Mr. McNeal, Messrs. Powell and Rimby. The largest of this kind of Mills is now in operation by Steam Power at the Junction of the Macon and Georgia Rail Road, Grinding Corn and Wheat.

We also Manufacture superior *Bone Mills*, and would refer to P. S. Chappell, John Kettlewell and Wm. Davison, Esqs.

Having served regular Apprenticeships to the Millwright Business, we feel assured that we can give perfect satisfaction to all who may favor us with their custom, either by day work, or in the performance of contracts, and will warrant all Grist, Saw, and other Mills, &c., propelled by Water, Steam, Wind or other Power, planned and erected by us, to operate well. Mill Work or other Machinery repaired at the shortest notice.

Nearly all the above gentlemen are acquainted with us as Millwrights. All orders thankfully received and promptly attended to.

MURRAY & CLARK, MILLWRIGHTS & MACHINISTS,
No. 21 York street, near Light st., Baltimore.

Nov. 1,

SHEW & MARKS'

DAGUERRIAN GALLERY,

117 *Baltimore street.*

HIGHEST PREMIUM AWARDED at the late *Fair of the Maryland Institute*, for the BEST DAGUERREOTYPES exhibited.

☞ Likenesses accurately taken in any weather, for Lockets, Signet Rings, &c., and satisfaction guaranteed in all cases.

☞ Paintings and Engravings correctly copied. jan1

TO FARMERS!

Rushbrook Farm for Sale.

SITUATED Three Miles north-east of Towsontown, Baltimore county, within 10 miles of this city, containing 450 acres, more or less; from 175 to 200 acres in cultivation. It is estimated that there are from 4 to 5000 cords of wood, consisting to a very great extent in chestnut rail timber—all the fields in cultivation have been heavily limed, the most of them at 100 bushels per acre. The above farm is newly and thoroughly fenced. The other improvements are, three new and excellent good sized log houses, and one extra size; also one extensive manager's house, having some 8 or 10 rooms; barn (called the three decker) 65 by 45 feet, just new, and having cost $1500, and built in the best manner; corn, hen and other houses; smith shop, and kiln capable of burning 1500 bushels. This farm is undulating; land very kind and susceptible of very high improvement. There is a fine young peach orchard. City property, or stocks will be taken in exchange at a fair valuation. For terms and other particulars, apply to

SAMUEL SANDS,
sep 1 Office American Farmer.

Brinkleyville Vineyards and Nurseries.

UPWARDS of twenty years experience, and, therefore, proper tests had of plants, &c., enables the subscriber to offer articles in his line particularly well adapted to Southern use: Well rooted Trees and Grape Vines (of the latter, the most Scuppernong, as best grape South) at from 10 to 40 cents each, according to size; Wines from 1 to 6 dollars per gallon, according to quality. Orders, with remittances or equivalent, and letters of enquiry, post paid, promptly attended to by the agricultural public's humble servant.

SIDNEY WELLER.

Brinkleyville, Halifax Co., N. C., Dec. 26, 1849.

Mr. Samuel Sands, my Agent at Baltimore, and Messrs. Peebles, White & Davis, at Petersburg, Va.

N. B. As invited by most respectable citizens of Raleigh (60 miles) to branch off my establishment thither, I may do so, if a suitable partner offers to manage my vineyards, and he put in a few hundred dollars for meeting expenses of ingredients, &c., for next crop of wine, that I may turn my resources to a new quarter; or if, for a few thousand dollars offered, or not to make too great a sacrifice, I *might sell* low, to *remove* to Raleigh. A *speculation* here offered, better, perhaps, than that of going to California. [1]-4t S. W.

NORTH-WESTERN REPOSITORY!
or
AGRICULTURAL IMPLLMENTS ! !

NOTICE!!

HAVING attended several County Fairs, and also the great State Fair, we deem it our duty to notify the farmers generally, of the success with which we have met, and in order that they may not be deceived in supposing that we attended those in which our name was not mentioned—we will, therefore, name those at which we were present, viz:

1st—The Montgomery Co. Fair, held September, 1849.
2d—The State Fair, held in Baltimore, October, 1849.
3d—The Talbot Co. Fair, held in Easton, Oct. & Nov. 1849.

LIST OF PREMIUMS RECEIVED.

1st Premium of $20, for best display of Implements.
1st do for best constructed plough, both 1 and 2 horse.
1st do do Ploughing.
1st do do Straw Cutter.
1st do do Cultivator—something new.
1st do do Harrow.
1st do do Fans.

Being experienced men in the various practical parts of the business, we think ourselves well qualified to give satisfaction—we warrant our work to be of the best materials and workmanship, and only request a call, in order to convince the farmer of the truth of the assertion.

☞All orders promptly attended to, and Implements delivered to any part of the city free of charge.

MAXFIELD, MOTT & CO.
No. 97 North Paca street, Baltimore.

CORN SHELLERS—CORN SHELLERS.

MAXFIELD MOTT & CO. call the attention of the farmers to their large and extensive stock of CORN SHELLERS, of various patterns and capacities, which they will be pleased to furnish on the most reasonable terms.

MAXFIELD, MOTT & CO.
jan1 No. 97 North Paca st., 3 doors S. of Franklin, Balt.

STRAW CUTTERS.

SMITH'S new and superior STRAW CUTTER, which, for durability, simplicity and price, cannot be surpassed. Also, the Cylindrical Box, for cutting straw, hay or fodder, so favorably known to the public. Kept constantly on hand by

jan1 MAXFIELD, MOTT & CO.

HAVING completed our arrangements with several of the best Nurseries in the country, we are now prepared to furnish both Fruit and Ornamental TREES, of the most choice and select varieties.

All orders for Trees of any description promptly attended to.

MAXFIELD, MOTT & CO.
jal No. 97 North Paca st., 3 doors south of Franklin.

KENTISH'S PREPARED GUANO for sale at N. York prices, by [marl] E. WHITMAN, Jr.

BAMBOROUGH'S
Celebrated Windmills, or Grain Fans.

THE subscriber offers his combined patent Windmill or Grain Fan to farmers, in the full assurance that it is by far the best article ever invented. In proof of this opinion he refers to the fact, that his fan has taken

25 Premiums and 4 Silver Medals

At the various agricultural exhibitions in Pennsylvania, New Jersey, Delaware and Maryland, within the last few years—not having failed to take the premium in a single instance! These premiums having been awarded after a careful examination by committees of intelligent practical farmers, a stronger evidence of the great superiority of the fan could not be desired.

Among the premiums taken last fall (1849) were that at the Maryland State Fair, held at Baltimore, in October, where there were thirty-two fans on the ground, among them Clowe's, Grant's, Behel's, Sinclair's, Pennock's, &c. After a thorough trial of them all, *the first premium was awarded to* BAMBOROUGH'S! At the Philadelphia county society's exhibition, Oct. 4 and 5, the committee pronounced Bamborough's fan to be "the most perfect and effectual cleaner ever exhibited." The fairs at Upper Marlborough, Md.; Mount Holly, N. J.; Jeffersonville, Pa.; the State fair at New Castle, Del., all awarded the first premium, after a fair trial against many other fans. A similar result followed every trial in the two preceding years.

The subscriber has had eighteen years experience in the business, and has made **5,700** fans. He refers to all who have used them for recommendations—with the remark that he has made several important improvements within two years past. To sum up the case in a few words—Bamborough's fan will clean faster and better, and with less power, than any other fan in use, as has been unanimously decided by every exhibition where a trial was made, and by the fifty-seven hundred farmers who have them in use. The best farmers in Lancaster, Berks, Chester, Delaware, and the other fine regions of Pennsylvania, use none but Bamborough's fans.

These Fans are kept for sale, of different sizes and price, by John Bamborough, Lancaster city, Pa.; Bamborough & Heckert, Port Deposit, Md.; Ezra Whitman, Jr., Pratt street, Baltimore; Samuel P. Smith, Cumberland, Md.; Wm. G. McCall, Davidsonville, Anne Arundel county, Md.; Elgin Russell, near Petersburg, Va.; David Landreth, Chestnut street, Philadelphia.

The great superiority of this fan has caused a number of imitations; purchasers will therefore be careful to see that they get the genuine article, which can be had by addressing any of the above persons.

Rights for States and Counties for sale. Agents wanted to sell rights. Direct to JOHN BAMBOROUGH,
mar 1t* Lancaster, Pa.

TAYLOR'S
PATENT HAMES.
Patented January 15, 1850.

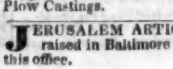
PUBLIC ATTENTION is solicited to this VALUABLE IMPROVEMENT in HAMES, which is both simple and effective. The benefits derived from the above improvement are of immense advantage both to the Owner and to the Worker of Horses—being a saving of expense as well as of time ! ! !

☞The advantage of these Hames are numerous—they can be fastened and unfastened as readily in the Dark as in the Light—and can be done with thick gloves or mittens. If a horse falls down or gets entangled in the harness, by this improvement he can be *instantly relieved*. A boy, female, or any one that is able to throw the harness on a horse, can fasten the hames very readily.

☞This Improvement can be attached to Hames that are now in use, at small cost.

☞These Hames were exhibited at the State Agricultural Fair, and were universally approved of—and for which a Premium was awarded.

☞The above Hames and Improvements can be had of the Patentee. MORTIMER TAYLOR,
No. 38 Ensor street, adjoining A. G. Mott's Plough Factory,
mar1 1t* Baltimore, Md.



A. G. MOTT.
AGRICULTURAL IMPLEMENT MANUFACTURER,
No. 38 *Ensor street*, near the Belair Market, Baltimore. Plows, Cultivators, Harrows, Wheat Fans, Straw Cutters, Grain Cradles, and all of the best and most approved Agricultural Implements in use.

☞AGENT for the celebrated N. York Wiley and Empire Plow Castings. marl

JERUSALEM ARTICHOKES.—For sale, a few barrels, raised in Baltimore county, at $1 per bushel. Apply at this office. marlt

Bennett's Poultry Book.

PHILLIPS, SAMPSON & CO.
110 *Washington street, Boston, Mass.*

Will publish, on the 10th of March,

THE POULTRY BOOK

—AND—

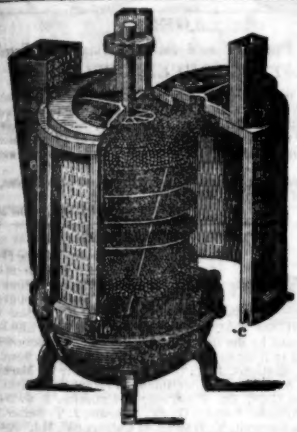
FOWL BREEDERS' GUIDE,

Being a treatise on the Breeding, Rearing, Fattening and general Management of Domestic Fowls, by JOHN C. BENNETT, M. D., illustrated with

FIFTY PORTRAITS OF FOWLS,

Taken from life. This work, it is believed, will contain more Practical Information, on the subject of Fowl Breeding, than all other works issued from the American press.

The above for sale by booksellers generally throughout the country, and at the office of the "*American Farmer,*" Baltimore, by [mar1 4t] SAMUEL SANDS.



LEONARD SMITH'S

PATENT VENTILATING SMUT MACHINE.

THIS MACHINE received a Gold Medal from the American Institute, New York, at its last Exhibition; a Silver Medal from the N. Y. State Agricultural Society, at its Exhibition at Syracuse in September last, and a Diploma from the Maryland State Agricultural Society, at its Exhibition in the city of Baltimore, in October last, and is highly approved of wherever it has been tried. It can be seen in operation at Geo. Page's Wind Mill, in Washington city; Jas. W. Osborne, Robertson's Mills, in Georgetown; and at Samuel Canby's Mills, at Ellicott's Mills, Md.; at Wm. B. Thomas', Spring Garden Mills, Philadelphia—where persons wishing to examine it can be satisfied of its utility. Orders for Machines will be promptly attended to, if addressed to

mar1-4t* LEONARD SMITH, Troy, N. Y.

HUSSEY'S REAPING MACHINE.

THE subscriber continues to manufacture his REAPING MACHINES, in Baltimore. Farmers are reminded to forward their orders at as early a day as the appearance of their fields will justify, that a proper preparation can be made to supply the increased demand—the question with the farmer now being not whether a machine will cut his crop, but whether he will have a good crop to cut with a machine.

Every improvement will be made this year to render the machines durable and perfect.

Price of Reapers, from 160 to 170 dollars. Extra parts will be furnished at moderate prices, and may be worth to the farmer ten times their cost.

Price of Mowing Machine, including Reaping, $125, and delivered in Baltimore, at any time from February to July.

Baltimore, March 1, 1850. OBED HUSSEY.

IRON WIRE.

500 BUNDLES IRON WIRE, including all numbers, suitable for Fencing, for sale by

mar1-4t E. L. PARKER & CO.
Cor. Calvert and Lombard streets.

GUANO—GUANO.

THE subscribers have now in store, and offer for sale to farmers and planters, Peruvian and Patagonian GUANO, in any quantities, and on pleasing terms.

The GUANO which we offer is warranted to be pure and unadulterated, put up in substantial bags, containing from 190, to 200 lbs., each bag having the brand of the State Inspector, and is marked No. 1 (Peruvian), No. 2 (1st quality Patagonian, [*☞ all others being of inferior or damaged quality;*] of which, purchasers should be careful to take note. Orders by mail or otherwise will receive our immediate attention.

P. MALCOLM & CO.
Dealers in Guano, Grain, Flour, &c.
mar1 No. 1 Wood street, Bowly's Wharf, Baltimore.

Interesting to Agriculturists.

KETTLEWELL & DAVISON'S
AGRICULTURAL DEPOT,
Baltimore Manufactory, Federal Hill.

OFFICE—corner of Lombard and Hanover streets, at Ober & McConkey's Wholesale Drug Store (down stairs).

CHEMICAL SALTS—*Renovator for Top-Dressing.*—The subscribers have now fully completed their arrangements, and have established an extensive AGRICULTURAL DEPOT, for the sale of Simple and Compound Chemical Manures. Experiment has fully shown, as authenticated by the most undoubted testimony, that their Compound, the RENOVATOR, has no equal as a top-dressing upon grain or grass. It is composed of the most powerful fertilizing elements of which we have knowledge, and, in its concentrated form, is less expensive than the mere labor of applying barn-yard manure. If the distrustly doubt its efficacy, let them try a single barrel upon the most unpromising wheat they have, and they will make a practical discovery equally valuable to them or to us. The price of this article is $3 per bbl., or $20 per ton.

BONE DUST.

They have on hand a constant supply of this article, ground by themselves, which is warranted free from adulteration.

GROUND PLASTER.

They have also erected a Plaster Mill, and offer to the farmer the very best quality of this article. Their names will be stencilled upon every barrel ground by them.

GROUND OYSTER SHELLS, NOT CALCINED.

They likewise keep this valuable article constantly on hand.

POT ASH.

They offer for sale 100 casks Crude Potash, for agricultural purposes, and almost indispensable when entirely extracted from the soil.

GENERATOR.

This is a Chemical Compound for the growth of the Tobacco Plant, and has been tried with complete success. Price $4 per barrel, or $28 per ton. With various other CHEMICAL RESIDIUMS, the value and price of which can be found upon appl cation to KETTLEWELL & DAVISON,
Office (down stairs) corner of Lombard and Hanover streets,
at the Wholesale Drug Store of
Messrs. Ober & McConkey.

FOR SALE,

A SMALL FARM, MILL AND TIMBER.

BY the last will of Dr. Robert Murphy, deceased, I am authorised to sell a small Farm and Grist Mill, on the head waters of the Nomony, in the county of Westmoreland, Virginia. The farm adjoins the mill seat, and contains about 170 acres. The land is not very fertile, but is of good soil, and improvable, and has on it some good white oak timber. The mill is now used only for grinding corn, but, at the time of his death, Dr. Murphy was about to add a saw mill, and, for that purpose, had purchased "Stanborough's patent wheel and fixtures," and prepared a good deal of timber, now at the mill, all of which may be had by the purchaser. The location is not very favorable for a grist mill, but admirable for a saw mill. Water power is abundant, and the best chestnut timber, in any quantity, for *railroad ties*, may be had, at a very low price, on and around the pond. Schooner navigation extends within a mile of the mill, and the timber may be boated from the mill sheets to the vessel. This property will be sold very low, if early application is made.

I have also for sale, on my own land, the "Black Ground," 5 miles from my residence, and near navigable water, a large lot of beautiful yellow Gum Timber, which will be sold very low, as it stands. For terms, apply at the office of the American Farmer, in Baltimore, to Samuel Sands, Esq., or to the subscriber, at "The Hague," Westmoreland Co., Va.

mar1 WILLOUGHBY NEWTON.

FOR SALE, a YOUNG BULL, out of an imported Ayrshire cow, by a fine Durham bull; he is about 20 months old, and in good order. Apply at this office, to S. SANDS. Price, $60. mar 3t

LAND FOR SALE.

THE subscriber offers for sale THREE HUNDRED ACRES of Land, in Westmoreland county, Virginia. This land lies immediately upon the Nomoni river, is of good soil, and possesses every possible advantage for improvement. Upon the farm upon which the subscriber resides, there is an inexhaustible deposite of oyster shells, to which the purchaser will have free access for all purposes of manuring; and the distance to haul the shells would not exceed one and a half miles to the farthest portion of his land. There is a plenty of Woodland attached for all purposes of the farm, and an abundance of scrap wood, to burn lime enough to manure the whole body of arable land.

There are "no improvements" upon the premises, but a most beautiful situation for a dwelling. This situation is remarkably healthy—much more so than is usually the case in the "tide water" section of Virginia. Terms, $3,000, with any indulgence, by securing the money, and paying interest. *All communications post paid.* Address

LANDON C. BERKELEY.

Rice's Store P. O., West. Co., Va. d 1-4t.

To Farmers and Planters.

THE New and Improved Poudrette of "The Lodi Manufacturing Co." is offered for sale the present season at the following rates, viz.—1 barrel, $2; 3 barrels, $5; and at the rate of $1 50 per barrel, for any quantity over 6 barrels. Delivered free from charge for barrels, cartage, or other expense, on board of vessels in the City of New York.

☞ *This article, made from night soil,* into a light dry and inodorous *powder, is the cheapest and most powerful manure in the world for corn or tobacco. Two barrels,* ($3 worth,) *will manure an acre of corn in the hill,* and will bring a heavier crop than can be obtained in any other way.

A pamphlet containing instructions for use, certificates from some of the first Agriculturists in the United States, and much valuable information, will be sent *gratis,* to any applying (*post paid* if by letter) to "The Lodi Manufacturing Co., 66 Dey street, New York." f 1-3t

JUST PUBLISHED,

THE COTTON PLANTATION RECORD AND ACCOUNT BOOK.

BY THOMAS AFFLECK.

A NEW EDITION, revised and improved.

No. 1 for a plantation of 40 hands or under, $2 50
No. 2 " 80 " " 3 00

This work, now in general use on well regulated plantations, consists of a good sized Blank Book, of excellent paper and well bound, and with every Record, Inventory and Account necessary for Planters or Overseers, properly arranged, ruled and headed. Send orders to WELD & CO., Pulishers, f 1-2t New Orleans.

BONE-DUST AND POUDRETTE ESTABLISHMENT.

On Harris' Creek, at Canton, Baltimore.

THOMAS BAYNES, continues the manufacture of *POUDRETTE,* and is prepared to supply any orders for the same—The article manufactured by him, will be found probably more valuable than any made in the Eastern cities. His *BONE-DUST* weighs from 55 to 60 lbs. to the bushel, and is as fine as any article sold in this market. Price of Bone Dust, 55 cents per bushel. Poudrette, $1.20 per barrel. Persons sending their carts or wagons to the factory, can obtain the Poudrette at 20 cents per bushel.

☞ Any orders left at the factory, or with Mr. S. SANDS, editor of the "*Farmer,*" at the State Agricultural Society's Rooms, will receive immediate attention. Terms, cash. mar 1 tf

Albion Life Insurance Company.

LONDON, NEW YORK AND BALTIMORE,

Was Instituted in 1805,

WITH A CAPITAL OF $5,000,000.

Example of Rates of Insurance for $100.

Age next birthday.	For one year.	For seven years.	Life without profits.	Life with profits.
25	98	1 02	1 92	2 17
30	1 06	1 13	2 19	2 48
35	1 18	1 25	2 55	2 88
40	1 31	1 44	3 00	3 38

Insurances are undertaken by the Company at all ages, from 10 to 74, and to any amount not exceeding $15,000, nor less than $500 upon any one life. Persons may reside in the Southern States or West Indies all the year by paying extra.

Prospectus with rates, and every information can be had on application to the agents. GUEST & GILMOR,

jaul tf No. 50, S. Gay street, Baltimore.

CHICKERING'S PIANOS.

THE subscriber is sole Agent in Baltimore, for the sale of Chickering's celebrated IRON FRAMED GRAND & SQUARE PIANO FORTES, and is constantly receiving supplies from the factory in Boston, which are sold at the same prices as charged by Mr. Chickering.

Chickering's Pianos are unquestionably the best instruments manufactured in the United States. In regard to superior quality of tone, touch, durability, and all the essential qualities of a Piano, they are admitted by the most eminent Pianists to be equal to Erard's, of Paris, or Broadwood's, of London. Although there are several factories in Boston and New York of high reputation, Mr. Chickering undoubtedly stands at the head, possessing eminent talent, skill, unceasing industry and experience of some 35 years as a manufacturer of pianos, with abundant means to enable him to carry out his plans in producing the very best instruments.

Orders from the country, entrusted to the subscriber, either for Pianos, Music or any article in his line of business, will be faithfully executed. F. D. BENTEEN,

oc1-6t 181 Baltimore street.

AGENCY

For the Purchase and Sale of Improved Breeds of

CATTLE, SHEEP, SWINE, &c.

I WISH to remind the farmers and planters of the Southern and Western States, that I still continue to purchase and sell improved Stock,—such as Cattle, Sheep, Swine and Poultry, of the different kinds and breeds, of a very reasonable commission. They will be carefully shipped, or sent away as ordered.

All letters, post paid, addressed to me, at Philadelphia, will be attended to without delay.

sep 1-6t AARON CLEMENT.

PLOUGHS! PLOUGHS!!

The subscriber is manufacturing Ploughs of various patterns and of different sizes; also Wheat Fans, Cylindrical Straw Cutters, Corn and Tobacco Cultivators, CORN SHELLERS, &c. Also,

THRESHING MACHINES and HORSE POWERS—these latter are used by the following gentlemen, to whom reference is made, as to their superior value, viz: Messrs. T. Beard, Thos Beard, Dr. Watkins, J. T. Hodges, T. Welsh, W. Mackall, J. Inglehart, A. Sellman, E. Sellman, W. Hopkins, J. Kent, Gen. Wells, Geo. Gale, Dr. Fenwick, A. Franklin, J. C. Weems, of Anne Arundel county; G. W. Weems, J. T. Barber, R. R. Chew, W. Boswell, Y. Howes, of Calvert co., Md. Agent of Evans Davis, Baltimore co. for sale of the woodcock Plow.

Pennsylvania Grain Cradles. CHAS. H. DRURY.

Gillingham Alley, entrance from Howard-st., near Fay, mal and store, Hollingsworth-st. corner Pra.

SPLENDID COLORED DAGUERREOTYPE PORTRAITS.

By C. W. PURCELL, (late operator for *Broadbent & Co.*)

No. 198 BALTIMORE STREET,

Over the American Office, and adjoining the Farmer Office.

HAVING a thorough knowledge of all the latest improvements in this beautiful art, Mr. Purcell feels a confidence in assuring the public that all pictures taken at his establishment shall combine a most correct likeness with the highest artistical skill. He will undertake to give the fullest satisfaction, or no charge will be made.

Ladies and gentlemen are requested to call at his rooms and examine his specimens. sep 1-1y.

DUVALL & IGLEHART,

GROCERS AND COMMISSION MERCHANTS,

No. 78 LIGHT STREET WHARF,

Invite the attention of their friends, and the public generally, to their large and general assortment of GROCERIES, embracing every *article* in that line of business, and which they will sell upon pleasing and liberal terms, and at the lowest prices. Any one in want of any article in their line will find it to their advantage to give them a call. *They will also pay particular attention to the sale of all kinds of produce.*

Baltimore, October 1, 1849. 3t

LIME.

THE subscribers are prepared to furnish Building and Agricultural Lime at the depot on the Back Basin, corner of Eden and Lancaster-sts., which they will warrant to give satisfaction, it being burnt from pure Alum Lime Stone, equal to any found in the United States. Orders may be left with WILLIAM ROBINSON, No. 15 Hollingsworth-street, near Pratt.

tf **FELL & ROBINSON,** City Block.

E. WHITMAN'S
Agricultural Warehouse
AND
SEED STORE,
No. 55 Light street, Baltimore,

WILL contain, this season, the largest stock of Improved AGRICULTURAL IMPLEMENTS ever offered for sale in this country, amongst which will be found

100 Whitman's Superior Wrought Iron Railway HORSE POWERS, which received the *first premium* at the last Fair of the *Maryland Agricultural Society.*

100 LEVER or SWEEP POWERS, among which will be found all the latest improvements; also, the Eddy or Saplin Power, which is portable, simple and durable, consisting of one wheel only.

200 Whitman's THRESHERS, which received the *first premium*, in Baltimore, in 1849. The cylinder of this Thresher, being all in one piece of iron, will last **100 YEARS**, in constant use. A great improvement has recently been made in the teeth or spikes, which makes it *the most perfect machine* now in use.

200 other THRESHERS, comprising various kinds and improvements.

7,000 PLOUGHS, consisting of every kind now in use, and a great variety of Cultivators, Harrows, Corn Planters, Corn Shellers, Straw Cutters, Wheat Fans, Cradles, Churns, &c., together with every other article in the farming line.

f1 EZRA WHITMAN, Jr.

GARDEN SEEDS.

FRESH and Genuine, raised by the best seedsmen in America and Europe, expressly for *E. Whitman, Jr.*, and sold, wholesale and retail, at his warehouse, 55 Light street, Baltimore.

☞The above seeds are put up for retailing, in the neatest manner, in packages, with name and directions printed on each parcel, at 6 1-4 cents each.

☞Merchants can be supplied, on the most favorable terms, with Boxes, from $5 to $50 each.

☞Market Gardeners are particularly invited to examine our stock of Seeds, which have been selected with great care, and are recommended the very best quality that can be procured. Also,

☞*Fruit and Ornamental Trees*, and *Farm and Garden Tools*, of every description.

☞GARDEN SEED PLANTERS. Price, $10. One man or boy will plant from one to five acres a day of garden seeds, such as beet, carrot, turnip, onion, &c. &c. For sale by

f1 E. WHITMAN, Jr.
Cor. Light and Pratt streets, Baltimore.

WHEAT FAN DEPOT.

GRANT'S, Bamborough's, Strong's, Rice's and various other WHEAT FANS, will be sold, wholesale and retail, at manufacturers' prices, by E. WHITMAN, Jr.

f1 Cor. of Light and Pratt streets, Baltimore.

Best Agricultural Implements!

The *first premiums* of the Maryland Agricultural Society was awarded to E. Whitman, Jr., in 1848 and 1849, for the largest and best display of Agricultural Implements. f1

R. SINCLAIR, Jr. & Co.
No. 62, *LIGHT STREET, BALTIMORE,*

OFFER FOR SALE, the following *IMPROVED MACHINERY*—viz:

Sinclair & Co's CYLINDRICAL STRAW CUTTERS—*warranted*—the most perfect machine of the kind in this country—there are 4 sizes made and constructed, both for manual and horse power.

Sinclair & Co's CORN STALK CUTTERS with Lacerators attached, which reduce the stalk and fodder to the finest state for stall feeding.

Common STRAW Cutters of various sorts and at low prices.

Sinclair & Co's VIRGINIA CORN SHELLERS, made to be worked by hand or horse power; capacity 1000 bush. pr. day.

Sinclair & Co's Columbiad, Goldsborough, and Atlee CORN SHELLERS, for horse power—capacity 1000 to 1500 bushels per day.

Sinclair & Co's Eagle Corn Shellers, made with single and double spouts, for hand power—capacity 150 to 250 bushels.

Sinclair & Co's single and double Iron spout Corn Shellers,—a new and excellent machine for hand power—capacity same as the Eagle.

Sinclair & Co's CORN & COB CRUSHERS—a most valuable and perfect machine, price $30, and capacity 80 bushels per day. ☞This machine is also admirably adapted for crushing corn, oats, &c. for stall feeding.

Sinclair & Co's HORSE POWERS, 4 sizes, and made for 1 or 12 horse power.

Sinclair & Co's Rail way or Endless Chain Powers, made with late valuable improvements.

Sinclair & Co's Improved Threshing Machines, 4 sizes.

—ALSO—

Wheat Screens,* Corn and Wheat Fanning Mills, Field Rollers, Clover threshing and cleaning machines, Plows for flushing, seeding, &c. A large and superior assortment Sausage Cutters and Stuffers, Plow and Machine Castings, and in store almost every Plow, Agricultural Machine and Tool wanted by the farmer. The assortment of

FIELD AND GARDEN SEEDS,

Now in store, is not surpassed for extent, variety or quality, by any seed establishment in this country.

SINCLAIR & CO.

dec1 *Agricultural Implement Makers and Seedsmen.*

*The Wheat Fan we now make has undergone very important improvements, and so constructed that they not only chaff with great rapidity, but cleanse the wheat entirely from all weed seeds, and put it in the finest order for market or seed.

POUDRETTE, &c.

POUDRETTE, from the Lodi Factory. Pulverized Carbonate of Lime for sale, in quantities to suit purchasers, by WILLIAM CHILD, No. 78 South street, Bowly's wharf, at 2 dollars per barrel. mr-1t*

Baltimore Fire Insurance Company.
No. 24 *South Street, Baltimore.*

THIS old established Company (incorporated by the legislature of Maryland, 1807,) continues to *INSURE AGAINST LOSS OR DAMAGE BY FIRE*, in the city or country, on the various descriptions of property: On Farms, Barns, Granaries, &c.—on Dwelling Houses, Storehouses and Warehouses,—on Merchandize—on Country Produce—on Household Furniture—on Vessels Building, on Vessels in Port, and on Cargoes, &c. &c.

The Board of Directors is composed of the following gentlemen: J. I. COHEN, Jr., President.

William Frick,	David S. Wilson,
Robert A. Taylor,	Wm. F. Worthington,
William G. Harrison,	Jas. A. Sangston,
Samuel T. Thompson,	William Gilmor,
George R. Vickers,	J. Pennington,
F. W. Alricks,	Joseph King, Jr.
S. Owings Hoffman,	

☞For forms of application, and any other information, apply at the office, No. 24 SOUTH STREET, where all cases are immediately attended to. Insurance can also be effected for any length of time that the applicant may desire.

*,*Applications for insurance in the country can be made by letter direct, or through the medium of correspondents of the party, residing in Baltimore. Answers can be promptly given, with all relative information which may be desired. Letters to be addressed to

FRED'K WOODWORTH, Sec'y.

Baltimore, September, 1849. sep 1

FOR SALE—100 bushels of BONE SHAVINGS—by R. BALL,

feb1-tf East Falls Avenue, near the Bridge, Baltimore.

Guano! Guano!!

THE subscribers offer for sale, in lots,
Peruvian GUANO, Government importation;
Patagonian do very superior;
do do second quality;
Clover Seed, Timothy Seed,
Millett Seed, Broomcorn Seed,
Ground Plasters, Ground Bones,
Ketilewell's Agricultural Renovator, at the manufacturers' prices. Reynolds' Corn Shellers.

They guarantee the purity of all Guano passing through their hands; and farmers ordering may depend on receiving it at the lowest prices, and every attention being given to its proper shipment. W. WHITELOCK & CO.
mar1 Corner Gay and High streets.

BLACK HAWK!

A FULL BRED MORGAN HORSE, both by sire and dam, will stand at Doughoregan Manor, 15 miles from Baltimore, on the Frederick Turnpike road, near Ellicott's Mills, Howard District.

☞ Season ending in September.

Black Hawk was sired by the Vermont Morgan Horse Black Hawk, owned by Messrs. D. E. & N. Hill, of Bridgeport, Vermont; he by the Sherman Morgan. For reference to this stock of horses, and their performance, see Cultivator, Turf Register and American Farmer, and other papers.

The dam of this Black Hawk was a thorough bred Morgan mare, who could trot a mile inside of three minutes, owned by Abel Rice, of Bridgeport, Vt.; her sire by the Butler Morgan, a celebrated trotter; dam of the Rice mare was also a Morgan. Black Hawk is allowed to be, by the best judges, one of the finest, if not the finest, colts ever raised in New England, and has all the points and characteristics of this celebrated race. He was foaled on the 3d July, 1846; is jet black; and will trot his mile, at this age, without training, in three minutes. His action is remarkably fine and majestic; his carriage bold and lofty. He has the advantage of size over his sire and other Morgans, being over 15½ hands high. 1st September, 1849, his weight was 1,044 lbs.

TERMS—$25 the season, prepaid; no insurance. Pasture and grain at usual market prices. All care taken of mares, but accidents at the risk of the owners.

Apply to the clerk, at the old quarter of Doughoregan Manor. Limited this season to 30 mares, 23 of which are engaged.

March 1, 1850.

"CHAPPELL'S FERTILIZER."

EXPERIENCE has shown that this article should be applied *early*, as a top-dressing, on Wheat, Clover, &c., from January to middle of March, before the land closes in the spring, and also to have the advantage of the *early rains*. If applied in this way, the increased yield of grain will fully or more than repay for the outlay, besides the additional clover secured by its use.

Farmers who have "winter-ploughed" their land, preparatory to a second ploughing in the spring, for corn or oats, will find it to their advantage to apply a *full dressing* of the "Fertilizer." If applied early, they secure the solution of the salt in the earth, and thus avoid the danger, to some extent, of a dry season.

I have received very satisfactory accounts from those who used it on *wheat*, this season; the indications, so far, are very favorable for a *large increased yield*, ascertained, in many cases, by leaving "*a land*:" *the difference* is very perceptible.

I am prepared to furnish orders for the article, as faithfully as ever; and, having increased my facilities for obtaining the materials out of which it is compounded, and improved machinery, to secure a finer division of the particles (thus making them more soluble), I consider the article to be "better than ever," and, under "circumstances" favorable to the action of *guano or any other manure*, it can be applied with *great profit* to any crop, and *as universally* as any other manure, to any soil. P. S. CHAPPELL,

Office (up stairs), Corner of Hanover and Lombard sts.

☞ *Every barrel is stenciled* "CHAPPELL'S FERTILIZER;" *none other is genuine.* jan1

WATER RAMS.—The undersigned will put up Water-Rams on the farms of gentlemen in the vicinity of Baltimore, and guarantee their performance. Rams of his construction, can be seen on the farms of Messrs. Wm. Jessop, Wm. Tagart, John Merryman, N. R. Merryman, E. P. Horn, Joshua Cockey, Dr. Tyson, Rider, and others, of Baltimore County, Md.; all of whom can testify to the correctness of the principle, and the value of the machine. All communications, or information upon the subject, will be promptly attended to. JAMES COOK,

Chatham Post Office, Chester County, Pa.

☞ Further particulars can be obtained of the Editor of the American Farmer, where orders may be left. jan1

Trees, Plants, Flowers and Seeds.

THE subscriber offers for sale a choice selection of Fruit and Ornamental Trees, Flowering Shrubs, Evergreens, Grape Vines, Roses, Camellias, Dahlias, Herbaceous Plants, Bulbous Roots, with a large collection of Greenhouse Plants in general, and a fresh stock of

GARDEN AND FLOWER SEEDS,

Just imported (annually), of superior quality, and offers every thing in his line on the most reasonable terms.

Victoria Rhubarb and Sea Kale plants, with Cabbage, Cauliflower, Egg plants and Tomatoes, in season for planting. All orders attended to. Address JOHN FEAST, Florist and Seedsman,
f1 279 Lexington street, Baltimore.

GUANO—GUANO.

300 tons Peruvian,
100 do first quality Patagonian,
100 do 2d do do

Regularly inspected, in strong cotton bags, and warranted to be of the very best description. Also, PLASTER, in barrels, City manufacture.

200 bushels SEED BUCKWHEAT, a superior article, from New York. All of which are offered for sale on best terms, for cash or approved paper, by S. FENBY & BRO.
mr 3t Cor. Gay and Pratt streets, Baltimore.

BALTIMORE GROUND PLASTER (ground fine,) made of the purest article, inspected and weighed by the State Inspector, each barrel being branded by him and containing 320lbs. the quantity required by law. For sale on the most reasonable terms by WM. A. DUNNINGTON,

Steam Mill on the South side of the Basin.

Who would respectfully inform the agricultural community that he has given the business of selecting and grinding plaster, his entire attention for the last ten years, and attends personally to the delivery of it on board of vessels in good order; he hopes that the satisfaction which he has heretofore given may still be appreciated by the Farmers and Planters of the State. He continues to give his entire attention to the same business, not being engaged in or in any way connected with the manufacture or sale of any of the many fertilizers, renovators or generators which have been lately brought to the notice of the public. mar1

AGRICULTURAL AND HORTICULTURAL IMPLEMENTS.

A LARGE and complete assortment of all kinds, both of foreign and American manufacture.

Also, Field and Garden SEEDS, imported and of home growth, and warranted fresh and true of their kinds.

A. B. ALLEN & CO.
f1-2t 189 and 191 Water street, New York.

FERTILIZERS.

PERUVIAN and Patagonian GUANO, Bone Dust, Plaster of Paris, Poudrette, and Combined Manure, a new and excellent article. A. B. ALLEN & CO.
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